State of Ohio Environmental Protection Agency

Street Address:
Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

**TELE:** (614) 644-3020 **FAX:** (614) 644-2329

Mailing Address:
Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

08/18/03

**CERTIFIED MAIL**

**RE: Draft Title V Chapter 3745-77 permit**

04-48-02-0007
BP Products North America Inc
Dennis C. Durnwald
4001 Cedar Point Road
P.O. Box 696
Oregon, OH 43697

Dear Dennis C. Durnwald:

You are hereby notified that the Ohio Environmental Protection Agency has prepared the enclosed draft of the Title V permit for the facility referenced above. The purpose of this draft is to solicit public comments. A public notice concerning the draft will appear in the Ohio EPA Weekly Review and the major newspaper in the county where the facility is located. Comments and/or a request for a public hearing from the public and any affected parties will be accepted by Toledo Div of Environmental Services within 30 days of the date of publication in the newspaper. You will be notified in writing if a public hearing is scheduled. **In order to facilitate our review of all the comments or concerns you may have with the enclosed draft permit, please provide a hand marked-up copy of the draft permit showing the changes you think are necessary, along with any additional summary comments, by the end of the draft public comment period. The hard marked-up copy and any additional summary comments should be submitted to the Ohio EPA District Office or local air agency identified below and to this office at the following address:**

**Ohio EPA, Division of Air Pollution Control**
**Permit Issuance and Data Management Section**
**Draft Title V Permit Correspondence**
**122 South Front Street**
**Columbus, Ohio 43215**

A decision on processing the Title V permit will be made after consideration of written public comments and oral testimony (if a public hearing is conducted). After the comment period, you will be provided with a Preliminary Proposed Title V permit and an opportunity to comment prior to the Proposed Title V permit submittal to USEPA.

If you have any questions concerning this draft Title V permit, please contact Toledo Div of Environmental Services.

Sincerely,

Michael W. Ahern

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

cc: USEPA (electronically submitted)
File, DAPC PMU
Toledo Div of Environmental Services
Indiana
Michigan

State of Ohio Environmental Protection Agency

# DRAFT TITLE V PERMIT

| Issue Date: 08/18/03 | Effective Date: To be entered upon final issuance | Expiration Date: To be entered upon final issuance |
|---|---|---|

This document constitutes issuance of a Title V permit for Facility ID: 04-48-02-0007 to:

BP Products North America Inc
4001 Cedar Point Road
P.O. Box 696
Oregon, OH 43697

## Emissions Unit ID (Company ID)/Emissions Unit Activity Description

B001 (Hydrogen Furnace)
PR-562980
Process Heater

B003 (ADHT Stripper Reboiler)
PR-562974
Process Heater

B004 (Riley Boiler (No. 3 Boiler))
PR-562965
Process Heater

B005 (Reformer 2 Regenerator Furnace)
PR-562985
Process Heater

B006 (Reformer 2 Furnace)
PR-562987
Process Heater

B008 (Iso 2 Feed Heater)
PR-562994
Process Heater

B009 (Iso 2 Stabilizer Reboiler)
PR-562992
Process Heater

B010 (Iso 2 Splitter Reboiler)
PR-562993
Process Heater

B014 (Reformer 1 Furnace)
PR-562962
Process Heater

B015 (Crude 1 Furnace)
PR-562954
Process Heater

B016 (Coker I Heater)
PR-562940
Process Heater

B017 (Coker II Heater)
PR-562941
Process Heater

B018 (FCC Preheater)
PR-562955
Process Heater

B019 (Crude/Vac 2 Furnace)
PR-562945
Process Heater

B020 (Power Boiler)
PR-562967
Process Heater

B022 (Naphtha Treater Heater)
PR-562958
Process Heater

B029 (ADHT Furnace)
PR-560002
Process Heater

B030 (BDHT Furnace)
PR-560001
Process Heater

B031 (Vac 1 Furnace)
PR-560003
Process Heater

B032 (Coker 3 Furnace)
PR-560004
Process Heater

F001 (Plant Roadways)
Plant Roadways

F004 (Coke Crushing )
Coke crushing

F005 (Coke Handling)
Wet coke transfer from coke pit

F006 (Coke Crushing)
PR-680246
Coke crushing

J001 (Aviation Gas Loading)
Aviation gas loading into rail cars.

J004 (Marine Loading)
Marine dock for loading and unloading petroleum products into/from ships/barges.

J005 (Asphalt Loading)
Rack for loading asphalt into tank trucks.

P007 (FCC & CO Boiler)
Fluidized catalytic cracking

P009 (Sulfur Recovery Unit)
Sulfur Recovery Unit

P010 (Crude/Vac 2)
Fractionation of crude oil

P011 (Crude/Vac 1)
Fractionation of crude oil

P013 (Belt Filter Press)
Belt Filter Press

P014 (Oily Belt Filter Press)
Belt Filter Press

P017 (Coker 2)
Delayed coking and coke cutting

P019 (Reformer 1)
Converts low octane naphtha into high octane gasoline.

P020 (Reformer 2)
Converts low octane naphtha into high octane gasoline.

P021 (Alky 1)
Produces high quality alkylate.

P022 (Alky 2)
Produces high octane gasoline.

P023 (Alky 3)
Produces high octane gasoline.

P025 (Refinery WWT System)
Wastewater treatment

P028 ("A" Train Diesel Hydrotreater)
Hydrotreating.

P029 ("B" Train Diesel Hydrotreater)
Hydrotreating.

P036 (Coker 3)
Delayed coking and coke cutting.

P037 (Sulfur Recovery Unit #2 and #3)
Sulfur recovery unit #2 and #3

P802 (Scaltech Unit)
Scaltech unit

T010 (IFR, PR-500152)
Storage of Petroleum Liquids

T011 (IFR, PR-500153)

Storage of Petroleum Liquids

T012 (IFR, PR-500403)
Storage of Petroleum Liquids

T013 (IFR, PR-500124)
Storage of Petroleum Liquids

T014 (IFR, PR-500079)
Storage of Petroleum Liquids

T015 (FR, PR-500080)
Storage of Petroleum Liquids

T016 (EFR, PR-500154)
Storage of Petroleum Liquids

T017 (EFR, PR-500155)
Storage of Petroleum Liquids

T018 (EFR, PR-500156)
Storage of Petroleum Liquids

T019 (EFR, PR-500157)
Storage of Petroleum Liquids

T020 (EFR, PR-500647)
Storage of Petroleum Liquids

T021 (EFR, PR-500646)
Storage of Petroleum Liquids

T024 (EFR, PR-500812)
Storage of Petroleum Liquids

T025 (EFR, PR-500811)
Storage of Petroleum Liquids

T026 (EFR, PR-500076)
Storage of Petroleum Liquids

T027 (EFR, PR-500186)
Storage of Petroleum Liquids

T028 (EFR, PR-500189)
Storage of Petroleum Liquids

T029 (EFR, PR-500099)
Storage of Petroleum Liquids

T030 (EFR, PR-500813)
Storage of Petroleum Liquids

T031 (EFR, PR-500814)
Storage of Petroleum Liquids

T032 (EFR, PR-500815)
Storage of Petroleum Liquids

T033 (EFR, PR-500816)
Storage of Petroleum Liquids

T034 (EFR, PR-500817)
Storage of Petroleum Liquids

T035 (EFR, PR-500143)
Storage of Petroleum Liquids

T036 (EFR, PR-500123)
Storage of Petroleum Liquids

T037 (EFR, PR-500122)
Storage of Petroleum Liquids

T038 (EFR, PR-500120)
Storage of Petroleum Liquids

T039 (EFR, PR-500121)
Storage of Petroleum Liquids

T040 (EFR, PR-500131)
Storage of Petroleum Liquids

T041 (EFR, PR-500130)
Storage of Petroleum Liquids

T044 (EFR, PR-500158)
Storage of Petroleum Liquids

T045 (IFR, PR-500776)
Storage of Petroleum Liquids

T046 (IFR, PR-500777)
Storage of Petroleum Liquids

T047 (FR, PR-500216)
Storage of Petroleum Liquids

T051 (IFR, PR-500697)
Storage of Petroleum Liquids

T052 (FR, PR-500041)
Storage of Petroleum Liquids

T053 (FR, PR-500048)
Storage of Petroleum Liquids

T055 (FR, PR-500049)
Storage of Petroleum Liquids

T056 (FR, PR-500055)
Storage of Petroleum Liquids

T058 (FR, PR-500058)
Storage of Petroleum Liquids

T059 (EFR, PR-500064)
Storage of Petroleum Liquids

T060 (EFR, PR-500065)
Storage of Petroleum Liquids

T061 (EFR, PR-500066)
Storage of Petroleum Liquids

T063 (FR, PR-500068)
Storage of Petroleum Liquids

T064 (FR, PR-500069)
Storage of Petroleum Liquids

T066 (FR, PR-500071)
Storage of Petroleum Liquids

T067 (FR, PR-500073)
Storage of Petroleum Liquids

T072 (EFR, PR-500082)
Storage of Petroleum Liquids

T073 (EFR, PR-500084)
Storage of Petroleum Liquids

T074 (IFR, PR-500094)
Storage of Petroleum Liquids

T075 (FR, PR-500106)
Storage of Petroleum Liquids

T076 (FR, PR-500107)
Storage of Petroleum Liquids

T077 (FR, PR-500108)
Storage of Petroleum Liquids

T078 (FR, PR-500109)
Storage of Petroleum Liquids

T079 (FR, PR-500110)
Storage of Petroleum Liquids

T080 (FR, PR-500111)
Storage of Petroleum Liquids

T081 (FR, PR-500112)
Storage of Petroleum Liquids

T082 (FR, PR-500118)
Storage of Petroleum Liquids

T083 (FR, PR-500133)
Storage of Petroleum Liquids

T084 (EFR, PR-500134)
Storage of Petroleum Liquids

T085 (EFR, PR-500135)
Storage of Petroleum Liquids

T086 (FR, PR-500140)
Storage of Petroleum Liquids

T087 (FR, PR-500141)
Storage of Petroleum Liquids

T088 (FR, PR-500142)
Storage of Petroleum Liquids

T089 (FR, PR-500151)
Storage of Petroleum Liquids

T090 (EFR, PR-500187)
Storage of Petroleum Liquids

T091 (EFR, PR-500188)
Storage of Petroleum Liquids

T092 (FR, PR-500217)
Storage of Petroleum Liquids

T093 (FR, PR-500230)
Storage of Petroleum Liquids

T096 (EFR, PR-500269)
Storage of Petroleum Liquids

T097 (EFR, PR-500270)
Storage of Petroleum Liquids

T099 (FR, PR-500401)
Storage of Petroleum Liquids

T100 (FR, PR-500402)
Storage of Petroleum Liquids

T101 (FR, PR-500404)
Storage of Petroleum Liquids

T102 (EFR, PR-500645)
Storage of Petroleum Liquids

T106 (FR, PR-500703)
Storage of Petroleum Liquids

T107 (FR, PR-500704)
Storage of Petroleum Liquids

T108 (FR, PR-500705)
Storage of Petroleum Liquids

T109 (FR, PR-500706)
Storage of Petroleum Liquids

T110 (FR, PR-500761)
Storage of Petroleum Liquids

T111 (FR, PR-500775)
Storage of Petroleum Liquids

T113 (FR, PR-500890)
Storage of Petroleum Liquids

T114 (FR, PR-500891)
Storage of Petroleum Liquids

T115 (FR, PR-500892)
Storage of Petroleum Liquids

T116 (FR, PR-500893)
Storage of Petroleum Liquids

T120 (EFR, PR-500132)
Storage of Petroleum Liquids

T122 (FR, PR-500260)
Storage of Petroleum Liquids

T136 (FR, PR-500686)
Storage of Petroleum Liquids

T137 (FR, PR-500688)
Storage of Petroleum Liquids

T138 (FR, PR-500687)
Storage of Petroleum Liquids

T139 (FR, PR-500685)
Storage of Petroleum Liquids

T164 (FR, PR-500295)
Storage of Petroleum Liquids

T166 (EFR, PR-500014)
Storage of Petroleum Liquids

T167 (EFR, PR-500015)
Storage of Petroleum Liquids

T170 (FR, PR-500294)
Storage of Petroleum Liquids

T174 (EFR, PR-500770)
Storage of Petroleum Liquids

T175 (FR, PR-500091)
Storage of Petroleum Liquids

T176 (FR, PR-500096)
Storage of Petroleum Liquids

T177 (IFR, PR-500757)
Storage of Petroleum Liquids

Z001 (Isocracker 2)
Cracking of heavy feed stocks.

Z002 (Hydrogen Plant)
Hydrogen Plant

Z006 (Poly Plant (PR-6920, 6921, 6923))
Poly Plant

Z007 (FR, PR-500162)
Storage of Petroleum Liquids

Z008 (FR, PR-500253)
Storage of Petroleum Liquids

Z009 (FR, PR-500254)
Storage of Petroleum Liquids

Z011 (FR, PR-500258)
Storage of Petroleum Liquids

Z012 (FR, PR-500275)
Storage of Petroleum Liquids

Z013 (FR, PR-500599)
Storage of Petroleum Liquids

Z014 (FR, PR-500735)
Storage of Petroleum Liquids

Z015 (FR, PR-500736)
Storage of Petroleum Liquids

Z017 (Diesel Engine #1)
Diesel Engine used to pump water

Z018 (Diesel Engine #2)
Diesel Engine used to pump water

Z019 (IFR, PR-500237)
Storage of Petroleum Liquids

Z032 (EPA Wet Gas Treater)
H2S removal from sour fuel gas

Z033 (East Side Amine Treater)
H2S removal from sour fuel gas

Z034 (Special Fuels Loading Rack)
Special Fuels Loading Rack

Z035 (Knock Motors)
Knock Motors

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the current Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

Toledo Div of Environmental Services
348 South Erie Street
Toledo, OH 43602-1633
(419) 936-3015

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

## PART I - GENERAL TERMS AND CONDITIONS

### *A. State and Federally Enforceable Section*

### 1. Monitoring and Related Record Keeping and Reporting Requirements

a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

i. The date, place (as defined in the permit), and time of sampling or measurements.
ii. The date(s) analyses were performed.
iii. The company or entity that performed the analyses.
iv. The analytical techniques or methods used.
v. The results of such analyses.
vi. The operating conditions existing at the time of sampling or measurement.
*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))*

b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))*

c. The permittee shall submit required reports in the following manner:

i. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*

ii. **All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) with respect to emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:**

(a) Written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations ; (ii) the probable cause of such deviations; and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Part III of this Title V permit, the written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year, and shall cover the previous calendar quarters. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. These written reports shall satisfy the

requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations. See B.6 below if no deviations occurred during the quarter.
*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) ,(ii) and (iii))*

(b) Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the deviation reporting requirements for this Title V permit, written reports that identify each malfunction that occurred during each calendar quarter shall be submitted, at a minimum, quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year, and shall cover the previous calendar quarters.

In identifying each deviation caused by a malfunction, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Also, if a deviation caused by a malfunction is identified in a written report submitted pursuant to paragraph (a) above, a separate report is not required for that malfunction pursuant to this paragraph. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing, at a minimum, on a quarterly basis.

Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation, operational restriction, and control device operating parameter limitation shall be reported in the same manner as described above for malfunctions. These written reports for malfunctions (and scheduled maintenance projects, if appropriate) shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations.
*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(iii))*

iii. **For monitoring, record keeping, and reporting requirements:**
Written reports that identify any deviations from the federally enforceable monitoring, record keeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year, for the previous six calendar months. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, record

keeping, and reporting requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no deviations occurred during that period.
*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii))*

iv. Each written report shall be signed by a responsible official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."
*(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))*

**2. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions unit(s) or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).
*(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iii))*

**3. Risk Management Plans**

If applicable, the permittee shall develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. ("Act"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or

as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

*(Authority for term: OAC rule 3745-77-07(A)(4))*

**4. Title IV Provisions**

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.
*(Authority for term: OAC rule 3745-77-07(A)(5))*

**5. Severability Clause**

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition

depends in whole or in part for its operation or implementation upon the term or condition declared invalid.
*(Authority for term: OAC rule 3745-77-07(A)(6))*

**6. General Requirements**

a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.

b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.10 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

d. This permit does not convey any property rights of any sort, or any exclusive privilege.

e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

*(Authority for term: OAC rule 3745-77-07(A)(7))*

**7. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.
*(Authority for term: OAC rule 3745-77-07(A)(8))*

**8. Marketable Permit Programs**

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.
*(Authority for term: OAC rule 3745-77-07(A)(9))*

**9. Reasonably Anticipated Operating Scenarios**

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these general terms and conditions shall apply to all operating scenarios authorized in this permit.
*(Authority for term: OAC rule 3745-77-07(A)(10))*

**10. Reopening for Cause**

This Title V permit will be reopened prior to its expiration date under the following conditions:

a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.

b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.

c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.

d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

*(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))*

**11. Federal and State Enforceability**

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.
*(Authority for term: OAC rule 3745-77-07(B))*

**12. Compliance Requirements**

a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:

i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
ii. Compliance certifications shall include the following:
(a) An identification of each term or condition of this permit that is the basis of the certification.
(b) The permittee's current compliance status.
(c) Whether compliance was continuous or intermittent.
(d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
(e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.

iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

*(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))*

**13. Permit Shield**

a. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.

b. This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

*(Authority for term: OAC rule 3745-77-07(F))*

**14. Operational Flexibility**

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

*(Authority for term: OAC rules 3745-77-07(H)(1) and (2))*

**15. Emergencies**

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

*(Authority for term: OAC rule 3745-77-07(G))*

**16. Off-Permit Changes**

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.

b. The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emission levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.

c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).

d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit to install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

(For purposes of clarification, the permittee can refer to Engineering Guide #63 that is available in the STARSHIP software package.)
*(Authority for term: OAC rule 3745-77-07(I))*

**17. Compliance Method Requirements**

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.
*(This term is provided for informational purposes only.)*

**18. Insignificant Activities**

Each insignificant activity that has one or more applicable requirements shall comply with those applicable requirements.
*(Authority for term: OAC rule 3745-77-07(A)(1))*

**19. Permit to Install Requirement**

Prior to the “installation” or “modification” of any “air contaminant source,” as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.
*(Authority for term: OAC rule 3745-77-07(A)(1))*

**20. Air Pollution Nuisance**

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.
*(Authority for term: OAC rule 3745-77-07(A)(1))*

## B. *State Only Enforceable Section*

### 1. Reporting Requirements Related to Monitoring and Record Keeping Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

### 2. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

### 3. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also

furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

**4. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

**5. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

**6. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)**

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

## Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| general provisions | 40 CFR Part 60, Subpart A<br>40 CFR Part 61, Subpart A<br>40 CFR Part 63, Subpart A<br>40 CFR Part 63, Subpart CC | See section A.I.2.a.<br>See section A.I.2.b.<br>See section A.I.2.c.<br>See section A.I.2.d. |
| equipment leaks, controlled by equipment design and operating and maintenance programs | OAC rule 3745-21-09(T)<br>40 CFR Part 60, Subpart GGG<br>40 CFR Part 63, Subpart CC | See section A.I.2.g.i.<br>See section A.I.2.e.<br>See sections A.I.2.d.x and A.I.2.d.xii. |
| storage vessels | 40 CFR Part 63, Subpart CC | See section A.I.2.d.xi |
| miscellaneous process vents | 40 CFR Part 63, Subpart CC | See section A.I.2.d.iv. |
| process unit turnarounds | OAC rule 3745-21-09(M)(3) | See section A.I.2.g.ii. |
| flares : East Flare, West Flare, TIU Acid Gas Flare, and TRP SRU Flare | OAC rule 3745-21-07(J)(2)<br>OAC rule 3745-21-07(J)(3)<br>OAC rule 3745-21-09(UU)(1)-(4) | See section A.I.2.f.i.<br>See section A.I.2.f.ii.<br>See section A.I.2.g.iii. |
| | OAC rule 3745-31-05(A)(3)<br>(PTI 04-1046) | See section A.I.2.h. |
| Fuel Burning Equipment | OAC rule 3745-14-01 | See section A.I.2.i. |
| | OAC rule 3745-31-02(A)(2)<br>(PTI 04-01290) | See section A.I.2.j. |
| Benzene Waste Operations | 40 CFR Part 61, Subpart FF | See section A.II.4. |
| Emissions units subject to MACT Hammer | Clean Air Act Section 112(j) | See section A.IV.8. |

## 2. Additional Terms and Conditions

2.a 40 CFR Part 60, Subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 60.

2.b 40 CFR Part 61, Subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 61.

2.c 40 CFR Part 63, Subpart A provides applicability provisions, definitions, and other general provisions that are applicable to emissions units affected by 40 CFR Part 63.

2.d 40 CFR Part 63, Subpart CC

i. [63.640(a)]
40 CFR Part 63, Subpart CC applies to petroleum refining process units that are located at a plant site that meet the criteria in paragraphs (a) and (b) below;

(a) Are located at a plant site that is a major source as defined in section 112(a) of the Clean Air Act; and

(b) Emit or have equipment containing or contacting one or more of the hazardous air pollutants (HAPs) listed in 40 CFR Part 63, Subpart CC, table 1.

ii. [63.640(c)]
For the purpose of 40 CFR Part 63, Subpart CC, the affected source shall comprise all HAP emission points, in combination, listed in paragraphs (a) through (d) below that are located at a single refinery plant site.

(a) All miscellaneous process vents from petroleum refining process units meeting the criteria in 40 CFR 63.640(a) [See section A.I];

(b) All storage vessels associated with petroleum refining process units meeting the criteria in 40 CFR 63.640(a) [See section A.I];

(c) All wastewater streams and treatment operations associated with petroleum refining process units meeting the criteria in 40 CFR 63.640(a) [See section A.I];

(d) All equipment leaks from petroleum refining process units meeting the criteria in 40 CFR 63.640(a) [See section A.I].

iii. [40 CFR 63.640(d)]
The affected source subject to 40 CFR Part 63, Subpart CC does not include the emission points listed in paragraphs (d)(1) through (d)(5) of 40 CFR 63.640.

(a) [63.640(d)(1)]
Stormwater from segregated stormwater sewers;

(b) [63.640(d)(2)]
Spills;

(c) [63.640(d)(3)]
Any pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, valve, or instrumentation system that is intended to operate in organic hazardous air pollutant service, as defined in 40 CFR 63.641, for less than 300 hours during the calendar year;

(d) [63.640(d)(4)]
Catalytic cracking unit and catalytic reformer catalyst regeneration vents, and sulfur plant vents; and

(e) [63.640(d)(5)]
Emission points routed to a fuel gas system, as defined in 40 CFR 63.641. No testing, monitoring, record keeping, or reporting is required for refinery fuel gas systems or emission points routed to refinery fuel gas systems.

iv. [63.640(f)] Miscellaneous Process Vents
The permittee shall follow the procedures specified in paragraphs (f)(1) through (f)(5) of 40 CFR 63.640 to determine whether a miscellaneous process vent from a distillation unit is part of a source to which 40 CFR Part 63, Subpart CC applies.

(a) [63.640(f)(1)]
If the greatest input to the distillation unit is from a process unit located on the same plant site, then the distillation unit shall be assigned to that process unit.

(b) [63.640(f)(2)]
If the greatest input to the distillation unit is provided from a process unit that is not located on the same plant site, then the distillation unit shall be assigned to the process unit located at the same plant site that receives the greatest amount of material from the distillation unit.

(c) [63.640(f)(3)]
If a distillation unit is shared among process units so that there is no single predominant use, as described in paragraphs (f)(1) and (f)(2) of 40 CFR 63.640, and at least one of those process units is a petroleum refining process unit subject to 40 CFR Part 63, Subpart CC, the distillation unit shall be assigned to the petroleum refining process unit that is subject to Subpart CC. If more than one petroleum refining

process unit is subject to 40 CFR Part 63, Subpart CC, the permittee may assign the distillation unit to any of the petroleum refining process units subject to 40 CFR Part 63, Subpart CC.

(d) [63.640(f)(4)]
If the process unit to which the distillation unit is assigned is a petroleum refining process unit subject to 40 CFR Part 63, Subpart CC and the vent stream contains greater than 20 parts per million by volume total organic hazardous air pollutants, then the vent from the distillation unit is considered a miscellaneous process vent (as defined in 40 CFR 63.641) and is part of the source to which Subpart CC applies.

(e) [63.640(f)(5)]
If the predominant use of a distillation unit varies from year to year, then the applicability of 40 CFR Part 63, Subpart CC shall be determined based on the utilization of that distillation unit during the year preceding promulgation of Subpart CC. This determination shall be reported as specified in 63.654 (h)(6)(iii) [See section A.IV].

v. [63.640(g)]
The provisions of 40 CFR Part 63, Subpart CC do not apply to the processes specified in 40 CFR 63.640(g)(1) through (g)(7).

(a) [63.640(g)(1)]
Research and development facilities, regardless of whether the facilities are located at the same plant site as a petroleum refining process unit that is subject to the provisions of 40 CFR Part 63, Subpart CC;

(b) [63.640(g)(2)]
Equipment that does not contain any of the hazardous air pollutants listed in Table 1 of 40 CFR Part 63, Subpart CC that is located within a petroleum refining process unit that is subject to 40 CFR Part 63, Subpart CC;

(c) [63.640(g)(3)]
Units processing natural gas liquids;

(d) [63.640(g)(4)]
Units that are used specifically for recycling discarded oil;

(e) [63.640(g)(5)]
Shale oil extraction units;

(f) [63.640(g)(6)]
Ethylene processes; and

(g) [63.640(g)(7)]
Process units and emission points subject to subparts F, G, H, and I of 40 CFR Part 63.

vi. [63.640(h)]
Except as provided in paragraphs (k), (l), or (m) of 40 CFR 63.640, sources subject to 40 CFR Part 63, Subpart CC are required to achieve compliance on or before the dates specified in paragraphs (h)(1) through (h)(4) of 40 CFR 63.640.

(a) [63.640(h)(1)]
New sources that commence construction or reconstruction after July 14, 1994 shall be in compliance with 40 CFR Part 63, Subpart CC upon initial startup or the date of promulgation of 40 CFR Part 63, Subpart CC, whichever is later, as provided in 40 CFR 63.6(b).

(b) [63.640(h)(2)]
Except as provided in paragraphs (h)(3) through (h)(5) of 40 CFR 63.640, existing sources shall be in compliance with 40 CFR Part 63, Subpart CC no later than August 18, 1998, except as provided in 40 CFR 63.6(c), or unless an extension has been granted by the Administrator as provided in 40 CFR 63.6(i).

(c) [63.640(h)(3)]
Marine tank vessels at existing sources shall be in compliance with 40 CFR Part 63, Subpart CC no later than August 18, 1999 unless the vessels are included in an emissions average to generate emission credits. Marine tank vessels used to generate credits in an emissions average shall be in compliance with 40 CFR Part 63, Subpart CC no later than August 18, 1998 unless an extension has been granted by the Administrator as provided in 40 CFR 63.6(i).

(d) [63.640(h)(4)]
Existing Group 1 floating roof storage vessels shall be in compliance with 40 CFR 63.646 at the first degassing and cleaning activity after August 18, 1998, or within 10 years after promulgation of the rule, whichever is first.

(e) [63.640(h)(5)]
An owner or operator may elect to comply with the provisions of 40 CFR 63.648(c) through (i) as an alternative to the provisions of 40 CFR 63.648(a) and (b). In such cases, the owner or operator shall comply no later than the dates specified in paragraphs (h)(5)(i) through (h)(5)(iii) of 40 CFR 63.640.

(i) [63.640(h)(5)(i)]

Phase I (see table 2 of 40 CFR Part 63, Subpart CC) [See section A.VI], beginning on August 18, 1998;

(ii) [63.640(h)(5)(ii)]
Phase II (see table 2 of 40 CFR Part 63, Subpart CC) [See section A.VI], beginning no later than August 18, 1999; and

(iii) [63.640(h)(5)(iii)]
Phase III (see table 2 of 40 CFR Part 63, Subpart CC) [See section A.VI], beginning no later than February 18, 2001.

vii. [40 CFR 63.640(i)]
If an additional petroleum refining process unit is added to a plant site that is a major source as defined in section 112(a) of the Clean Air Act, the addition shall be subject to the requirements for a new source if it meets the criteria specified in paragraphs (a) through (c) below:

(a) It is an addition that meets the definition of construction in 40 CFR 63.2 of Subpart A of 40 CFR Part 63

(b) Such construction commenced after July 14, 1994; and

(c) The addition has the potential to emit 10 tons per year or more of any HAP or 25 tons per year or more of any combination of HAPs.

Note: The petroleum refining process unit addition which comprises this permit has a potential to emit of HAPs less than levels listed in paragraph (c) above. Therefore, the petroleum refining process unit addition which comprises this permit is subject to the requirements of 40 CFR Part 63, Subpart CC as an existing source, as described in 40 CFR 63.640(l) [See section I].

viii. [63.640(l)]
If an additional petroleum refining process unit is added to a plant site or if a miscellaneous process vent, storage vessel, gasoline loading rack, or marine tank vessel loading operation that meets the criteria in 40 CFR 63.640(c)(1) through (c)(7) of Subpart CC is added to an existing petroleum refinery or if another deliberate operational process change creating an additional Group 1 emission point(s) (as defined in 63.641 of Subpart CC) is made to an existing petroleum refining process unit, and if the addition or process change is not subject to the new source requirements as determined according to 40 CFR 63.640(i) or (j) of Subpart CC, the requirements in paragraphs (l)(1) through (l)(3) of 40 CFR 63.640 shall apply. Examples of process changes include, but are not limited to, changes in production capacity, or feed or raw material where the change requires construction or physical alteration of the existing equipment or catalyst type, or whenever there is replacement, removal, or addition of recovery equipment. For purposes of this paragraph and

63.640(m) [See section A.I.2.], process changes do not include: process upsets, unintentional temporary process changes, and changes that are within the equipment configuration and operating conditions documented in the Notification of Compliance Status report required by 40 CFR 63.654(f).

(a) [63.640(l)(1)]
The added emission point(s) and any emission point(s) within the added or changed petroleum refining process unit are subject to the requirements for an existing source.

(b) [63.640(l)(2)]
The added emission point(s) and any emission point(s) within the added or changed petroleum refining process unit shall be in compliance with 40 CFR Part 63, Subpart CC, by the dates specified in paragraphs (l)((2)(i) or (l)(2)(ii) of 40 CFR 63.640, as applicable.

(i) [63.640(l)(2)(i)]
If a petroleum refining process unit is added to a plant site or an emission point(s) is added to any existing petroleum refining process unit, the added emission point(s) shall be in compliance upon initial startup of any added petroleum refining process unit or emission point(s) or by 3 years after the date of promulgation of 40 CFR Part 63, Subpart CC, whichever is later.

(ii) [63.640(l)(2)(ii)]
If a deliberate operational process change to an existing petroleum refining process unit causes a Group 2 emission point to become a Group 1 emission point (as defined in 40 CFR 63.641), the permittee shall be in compliance upon initial startup or by 3 years after the date of promulgation of 40 CFR Part 63, Subpart CC, whichever is later, unless the permittee demonstrates to the Administrator that achieving compliance will take longer than making the change. If this demonstration is made to the Administrator's satisfaction, the permittee shall follow the procedures in 63.640(m)(1) through (m)(3) [See section A.I.2.] to establish a compliance date.

(c) [63.640(l)(3)]
The permittee of a petroleum refining process unit or of a storage vessel, miscellaneous process vent, wastewater stream, gasoline loading rack, or marine tank vessel loading operation meeting the criteria in 40 CFR 63.640(c)(1) through (c)(7) of Subpart CC, that is added to a plant site and is subject to the requirements for existing sources shall comply with the reporting and record keeping requirements that are applicable to existing sources including, but not limited to, the reports listed in paragraphs (l)(3)(i) through (l)(3)(vii)

of 40 CFR 63.640. A process change to an existing petroleum refining process unit shall be subject to the reporting requirements for existing sources including, but not limited to, the reports listed below. The applicable reports include, but are not limited to:

(i) [63.640(l)(3)(i)]
the Notification of Compliance Status report as required by 40 CFR 63.654(f) for the emission points that were added or changed;

(ii) [63.640(l)(3)(ii)]
Periodic Reports and other reports as required by 40 CFR 63.654(g) and (h);

(iii) [63.640(l)(3)(iii)]
reports and notifications required by sections of Subpart A of 40 CFR Part 63 that are applicable to 40 CFR Part 63, Subpart CC, as identified in table 6 of Subpart CC .

(iv) [63.640(l)(3)(iv)]
reports and notifications required by 40 CFR 63.182 or 40 CFR 60.487. The requirements of Subpart H of 40 CFR Part 63 are summarized in table 3 of Subpart CC [See section A.VI];

(v) [63.640(l)(3)(v)]
reports required by 40 CFR 61.357 of Subpart FF;

(vi) [63.640(l)(3)(vi)]
reports and notifications required by 40 CFR 63.428(b), (c), (g)(1) and (h)(1) through (h)(3) of subpart R. These requirements are summarized in table 4 of 40 CFR Part 63, Subpart CC [See section A.VI]; and

(vii) [63.640(l)(3)(vii)]
Reports and notifications required by 40 CFR 63.567 of subpart Y. These requirements are summarized in table 5 of 40 CFR Part 63, Subpart CC .

(d) [63.640(l)(4)]
If pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, or instrumentation systems are added to an existing source, they are subject to the equipment leak standards for existing sources in 40 CFR 63.648 [See section A.II.]. A notification of compliance status report shall not be required for such added equipment.

ix. [63.640(m)]
If a change that does not meet the criteria in 63.640(l) [See section A.I.2.] is made to a petroleum refining process unit subject to 40 CFR Part 63, Subpart CC, and the change causes a Group 2 emission point to become a Group 1 emission point (as defined in 40 CFR 63.641), the permittee shall comply with the requirements of Subpart CC for existing sources for the Group 1 emission point as expeditiously as practicable, but in no event later than 3 years after the emission point becomes Group 1.

(a) [63.640(m)(1)]
The permittee shall submit to the Administrator for approval a compliance schedule, along with a justification for the schedule.

(b) [63.640(m)(2)]
The compliance schedule shall be submitted within 180 days after the change is made, unless the compliance schedule has been previously submitted to the permitting authority. If it is not possible to determine until after the change is implemented whether the emission point has become Group 1, the compliance schedule shall be submitted within 180 days of the date when the affect of the change is known to the source. The compliance schedule may be submitted in the next Periodic Report if the change is made after the date the Notification of Compliance Status report is due.

(c) [63.640(m)(3)]
The Administrator shall approve or deny the compliance schedule or request changes within 120 calendar days of receipt of the compliance schedule and justification. Approval is automatic if not received from the Administrator within 120 calendar days of receipt.

x. (a) [63.648(a)] - Equipment Leaks
The permittee of an existing source subject to the provisions of 40 CFR Part 63, Subpart CC shall comply with the provisions of 40 CFR Part 60, Subpart VV and 40 CFR 63.648(b) [See section A.II] except as provided in paragraphs (a)(1), (a)(2) [see below], and (c) through (i) of 40 CFR 63.648 [See section A.II.]. The permittee of a new source subject to the provisions of 40 CFR Part 63, Subpart CC shall comply with 40 CFR Part 63, Subpart H except as provided in paragraphs (c) through (i) of 40 CFR 63.648.

(i) [63.648(a)(1)]
For purposes of compliance with 40 CFR 63.648, the provisions of 40 CFR Part 60, Subpart VV apply only to equipment in organic HAP service, as defined in 40 CFR 63.641.

(ii) [63.648(a)(2)]

Calculation of percentage leaking equipment components of 40 CFR Part 60 Subpart VV may be done on a process unit basis or a sourcewide basis. Once the permittee has decided, all subsequent calculations shall be on the same basis unless a permit change is made.

(b) [63.648(c)]
In lieu of complying with the existing source provisions of paragraph (a) in this section, the permittee may elect to comply with the requirements of 40 CFR 63.161 through 63.169, 63.171, 63.172, 63.175, 63.176, 63.177, 63.179, and 63.180 of Subpart H of 40 CFR Part 63 except as provided in paragraphs (c)(1) through (c)(10) and (e) through (i) of 40 CFR 63.648.

xi. [63.640(n)] - Storage Vessels
Overlap of 40 CFR Part 63, Subpart CC with other regulations for storage vessels.

(a) [63.640(n)(1)]
After the compliance dates specified in 40 CFR 63.640(h), a Group 1 or Group 2 storage vessel that is part of an existing source and is also subject to the provisions of 40 CFR Part 60, Subpart Kb, is required to comply only with the requirements of 40 CFR Part 60, Subpart Kb, except as provided in paragraph 40 CFR 63.640(n)(8).

(b) [63.640(n)(2)]
After the compliance dates specified in 40 CFR 63.640(h), a Group 1 storage vessel that is part of a new source and is subject to 40 CFR Part 60, Subpart Kb is required to comply only with 40 CFR Part 63, Subpart CC.

(c) [63.640(n)(3)]
After the compliance dates specified in 40 CFR 63.640(h), a Group 2 storage vessel that is part of a new source and is subject to the control requirements in 60.112b of 40 CFR Part 60, Subpart Kb is required to comply only with 40 CFR Part 60, Subpart Kb except as provided in 40 CFR 63.640(n)(8).

(d) [63.640(n)(4)]
After the compliance dates specified in 40 CFR 63.640(h), a Group 2 storage vessel that is part of a new source and is subject to 40 CFR 60.110b, but is not required to apply controls by 40 CFR 60.110b or 60.112b is required to comply only with 40 CFR Part 63, Subpart CC.

(e) [63.640(n)(5)]
After the compliance dates specified in 40 CFR 63.640(h), a Group 1 storage vessel that is also subject to the provisions of 40 CFR Part 60,

subparts K or Ka is required to only comply with the provisions of 40 CFR Part 63, Subpart CC.

(f) [63.640(n)(6)]
After compliance dates specified in 40 CFR 63.640(h), a Group 2 storage vessel that is subject to the control requirements of 40 CFR Part 60, subparts K or Ka is required to comply only with the provisions of 40 CFR Part 60, subparts K or Ka except as provided for in 40 CFR 63.640(n)(9).

(g) [63.640(n)(7)]
After the compliance dates specified in 40 CFR 63.640(h), a Group 2 storage vessel that is subject to 40 CFR Part 60, subparts K or Ka, but not to the control requirements of 40 CFR Part 60, subparts K or Ka, is required to comply only with 40 CFR Part 63, Subpart CC.

(h) [63.640(n)(8)]
Storage vessels described by paragraphs (n)(1) through (n)(3) of 40 CFR 63.640 are to comply with 40 CFR Part 60, Subpart Kb except as provided for in paragraphs (n)(8)(i) through (n)(8)(vi) of 40 CFR 63.640.

(i) [[63.640(n)(8)(i)]
Storage vessels that are to comply with 40 CFR 60.112b(a)(2) of Subpart Kb are exempt from the secondary seal requirements of 60.112(a)(2)(i)(B) during the gap measurements for the primary seal required by 60.113(b) of Subpart Kb.

(ii) [63.640(n)(8)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 60.113b(b) of Subpart Kb or to inspect the vessel to determine compliance with 60.113b(a) of Subpart Kb because the roof appears to be structurally unsound and poses an imminent danger to inspecting personnel, the permittee shall comply with the requirements in either 40 CFR 63.120(b)(7)(i) or 63.120(b)(7)(ii) of Subpart G.

(iii) [63.640(n)(8)(iii)]
If a failure is detected during the inspections required by 60.113b(a)(2) or during the seal gap measurements required by 60.113b(b)(1), and the vessel cannot be repaired within 45 days and the vessel cannot be emptied within 45 days, the permittee may utilize up to two extensions of up to 30 additional calendar days each. The permittee is not required to provide a request for the extension to the Director or Administrator.

(iv) [63.640(n)(8)(iv)]

If an extension is utilized in accordance with 40 CFR 63.640(n)(8)(iii), the permittee shall, in the next periodic report, identify the vessel, provide the information listed in 40 CFR 60.113b(a)(2) or 60.113b(b)(4)(iii), and describe the nature and date of the repair made or provide the date the storage vessel was emptied.

(v) [63.640(n)(8)(v)]
Permittees of storage vessels complying with Subpart Kb of part 60 may submit the inspection reports required by 60.115b(a)(3), (a)(4) and (b)(4) of Subpart Kb as part of the periodic reports required by 40 CFR Part 63, Subpart CC, rather than within the 30-day period specified in 60.115b(a)(3), (a)(4), and (b)(4) of Subpart Kb.

(vi) [63.640(n)(8)(vi)]
The reports of rim seal inspections specified in 60.115b(b)(2) are not required if none of the measured gaps or calculated gap areas exceed the limitations specified in 60.113b(b)(4). Documentation of the inspections shall be recorded as specified in 60.115b(b)(3).

xii. [63.640(p)] Equipment Leaks
Equipment leaks subject to 40 CFR Part 63, Subpart CC that are also subject to the provisions of 40 CFR Parts 60 and 61 are required to comply only with the provisions specified in 40 CFR Part 63, Subpart CC.

xiii. [63.640(q)] Overlap with Local or State Regulations
The permitting authority of the affected source may allow consolidation of the monitoring, record keeping, and reporting requirements under 40 CFR Part 63, Subpart CC with the monitoring, record keeping and reporting requirements under other applicable requirements in 40 CFR Parts 20, 61, 63, and in any 40 CFR Part 52 approved State implementation plan provided the implementation plan allows for approval of alternative monitoring, reporting, or record keeping requirements and provided that the permit contains an equivalent degree of compliance and control.

xiv. [63.642(c)]
Table 6 of 40 CFR Part 63, Subpart CC [See section A.VI] specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to sources subject to of 40 CFR Part 63, Subpart CC. These applicable provisions of 40 CFR Part 63, Subpart A have been summarized and included as section A.VI. of this permit. It is the permittee's responsibility to review these regulations to ensure compliance and to incorporate any requirements of these regulations into the design, monitoring, record keeping and reporting for this emissions unit.

2.e [40 CFR Part 60, Subpart GGG]

i. [60.590(a)]
The provisions of 40 CFR Part 60, Subpart GGG applies to petroleum refinery equipment leaks of VOC from a compressor, valve, pump, pressure relief device, sampling connection system, open-ended valve or line, and flange or other connector in VOC service.

ii. [60.592(a)]
The permittee shall demonstrate compliance with the VOC requirements of 40 CFR Part 60, Subpart GGG by complying with the VOC requirements of 40 CFR Part 60, Subpart VV, sections 60.482-1 to 60.482-10, as described in section A.II. of this permit.

iii. [60.592(d)]
The permittee shall also comply with the provisions of 40 CFR 60.485 through 60.487, as described in sections A.III., A.IV. and A.V. of this permit.

2.f [OAC rule 3745-21-07(J)] Waste Gas Disposal

i. [OAC rule 3745-21-07(J)(2)]
No person shall emit organic materials into the atmosphere from a waste gas flare system unless such materials are burned by smokeless flares, or an equally effective control equipment as provided by the director.

ii. [OAC rule 3745-21-07(J)(3)]
The provisions of paragraph OAC rule 3745-21-07(J)(2) shall not apply to emissions from emergency relief and vapor blowdown systems. Emissions from emergency relief and vapor blowdown systems shall be controlled upon special order of the Director of Ohio EPA by burning by smokeless flare, or equally effective control equipment as may be approved by the Director. The August 19, 1987 Director's Final Findings and Orders requiring the "smokeless" operation of flares defines smokeless operation as no visible emissions, as determined by U.S. EPA Reference Method 22, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

Failure of the flares to operate in a smokeless manner, except for reliefs which exceed the steam assist capabilities of the flare(s), shall be a violation of OAC rule 3745-21-07(J)(3). Malfunction of the steam assist system (such as damage to the steam ring) would not give rise to enforcement action for violations of the 1987 Final Findings and Orders during the period necessary for the flare to be safely repaired.

2.g [OAC rule 3745-21-09] Control of VOC from Stationary Sources

i. [OAC rule 3745-21-09(T)] Leaks from Petroleum Refinery Equipment

This regulation applies to petroleum refinery equipment leaks of volatile organic compounds from pump seals, pipeline valves, process drains, compressor seals and pressure relief devices.

(a) [OAC rule 3745-21-09(T)(1)]
Except as otherwise provided in paragraphs OAC rule 3745-21-09(T)(1)(b) and (T)(1)(c) [See section A.III.], the permittee shall establish a leak detection and repair program for the sources identified in OAC rule 3745-21-09(T), in compliance with the monitoring, record keeping and reporting requirements of sections A.II., A.III. and A.IV. of this permit.

(b) Pressure relief devices which are connected to an operating flare header, vapor recovery devices, valves which are located in pipelines containing kerosene or heavier liquids, storage tank valves and valves which are not externally regulated are exempt from the monitoring requirements contained in section A.III.

ii. [OAC rule 3745-21-09(M)(3)(a)] PROCESS UNIT TURNAROUNDS
The permittee shall control the emissions of VOC from process unit turnarounds by combusting the vapors as fuel gas or by flaring the vapors until the pressure in the process vessel is 19.7 pounds per square inch absolute or less.

iii. [OAC rule 3745-21-09(UU)] Facility-Specific VOC Emissions Requirements

(a) [OAC rule 3745-21-09(UU)(1)]
All VOC emissions from the SPOP waterwash tower spentwash flash drum and the POLY waterwash tower spentwash flash drum shall be vented to a flare that complies with the requirements of OAC rule 3745-21-09(DD)(10)(d) [See section A.II].

(b) [OAC rule 3745-21-09(UU)(2)]
All VOC emissions from the Alkyl 1 blowdown drum and the Alkyl 2 blowdown drum shall be vented to a flare that complies with the requirements of OAC rule 3745-21-09(DD)(10)(d) [See section A.II].

(c) [OAC rule 3745-21-09(UU)(3)]
All VOC emissions from the Coker 2 blowdown drum shall be vented to a flare that complies with the requirements of OAC rule 3745-21-09(DD)(10)(d) [See section A.II].

(d) [OAC rule 3745-21-09(UU)(4)]
All process wastewater from the crude desalter shall be discharged to a steam stripper for the recovery of condensable hydrocarbons, and all VOC emissions from the steam stripper shall be vented to a flare that

complies with the requirements of OAC rule 3745-21-09(DD)(10)(d) [See section A.II].

2.h [OAC rule 3745-31-05(A)(3)] Best Available Technology
The Coker 2 blowdown drum shall be vented to a flare that complies with the requirements of OAC rule 3745-21-09(DD)(10)(d) [See section A.II].

2.i [OAC chapter 3745-14] $NO_x$ Budget Trading Program

i. [OAC rule 3745-14-01(C)(1)]
The following units shall be NOx budget units, and any source that includes one or more such units shall be a NOx budget source, subject to the requirements of OAC rule 3745-14 [See sections A.II, A.III and A.IV]:

(a) [OAC rule 3745-14-01(C)(1)(b)]
For non-electric generating units:

(i) for units that commenced operation before January 1, 1997, a unit that has a maximum design heat input greater than 250 mmBtu/hr and that did not serve during 1995 or 1996 a generator producing electricity for sale under a firm contract to the electric grid;

(ii) for units that commenced operation on or after January 1, 1997 and before January 1, 1999, a unit that has a maximum design heat input greater than 250 mmBtu/hr and that did not serve during 1997 or 1998 a generator producing electricity for sale under a firm contract to the electric grid;

(iii) for units that commence operation on or after January 1, 1999, a unit with a maximum design heat input greater than 250 mmBtu/hr that:

(aa) at no time serves a generator producing electricity for sale; or

(bb) at any time serves a generator producing electricity for sale, if any such generator has a nameplate capacity of twenty-five MWe or less and has the potential to use no more than fifty per cent of the potential electrical output capacity of the unit.

ii. [OAC rule 3745-14-01(C)(2)]
OAC rule 3745-14-01(C)(2) contains exemptions from the NOx budget trading program.

iii. [OAC rule 3745-14-01(D)]

Retired emissions unit exemptions are identified under OAC rule 3745-14-01(D).

iv. [OAC rule 3745-14-03]
$NO_x$ Budget Permit Applications

The permittee shall submit a complete NOx budget permit application as defined under OAC rule 3745-14-03(C)(1) to the Director by the dates specified under OAC rule 3745-14-03(B)(2). The NOx authorized account representative shall also submit, in a timely manner, any supplemental information that the Director determines is necessary in order to review a NOx budget permit application and issue or deny a NOx budget permit.

v. [OAC rule 3745-14-09(A)]
A unit that is not a NOx budget unit under paragraph (C) of OAC rule 3745-14-01, vents all of its emissions to a stack, and is operating, may qualify, under OAC chapter 3745-14, to become a NOx budget opt-in unit. A unit that is a NOx budget unit under paragraph (C) of OAC rule 3745-14-01, is covered by a retired unit exemption under paragraph (D) of OAC rule 3745-14-01 that is in effect, or is not operating is not eligible to become a NOx budget opt-in unit.

vi. The permittee shall comply with the requirements of OAC chapter 3745-14.

2.j By no later than September 30, 2003, all heaters and boilers at this facility shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices.

## II. Operational Restrictions

1. 40 CFR Part 63, Subpart CC

a. [63.648] EQUIPMENT LEAK STANDARDS

i [63.648(b)]
The use of monitoring data generated before August 18, 1995 to qualify for less frequent monitoring of valves and pumps as provided under 40 CFR Part 60, Subpart VV or Subpart H of 40 CFR Part 63 and 40 CFR 63.648(c) (i.e., quarterly or semiannually) [See section A.II] is governed by the requirements of paragraphs (b)(1) and (b)(2) of 40 CFR 63.648.

(a) [63.648(b)(1)]
Monitoring data must meet the test methods and procedures specified in 40 CFR 60.485(b) of Subpart VV or 40 CFR 63.180(b)(1) through (b)(5) of Subpart H except for minor departures [See section A.V].

(b) [63.648(b)(2)]
Departures from the criteria specified in 40 CFR 60.485(b) or 40 CFR 63.180(b)(1) through (b)(5) [See section A.V] or from the monitoring frequency specified in 40 CFR Part 60, Subpart VV or in 40 CFR 63.648(c) (such as every 6 weeks instead of monthly or quarterly) [See section A.II] are minor and do not significantly affect the quality of the data. An example of a minor departure is monitoring at a slightly different frequency (such as every 6 weeks instead of monthly or quarterly). Failure to use a calibrated instrument is not considered a minor departure.

ii. [63.648(c)]
In lieu of complying with the existing source provisions of paragraph (a) in this section, the permittee may elect to comply with the requirements of 40 CFR 63.161 through 63.169, 63.171, 63.172, 63.175, 63.176, 63.177, 63.179, and 63.180 of Subpart H of 40 CFR Part 63 [see sections A.II, A.III, and A.V] except as provided in paragraphs (c)(1) through (c)(10) and (e) through (i) of 40 CFR 63.648.

(a) [40 CFR 63.648(c)(1)]
The instrument readings that define a leak for light liquid pumps subject to 40 CFR 63.163 of Subpart H of 40 CFR Part 63 and gas/vapor and light liquid valves subject to 40 CFR 63.168 of Subpart H of 40 CFR Part 63 are specified in table 2 of 40 CFR Part 63, Subpart CC [See section A.VI].

(b) [40 CFR 63.648(c)(2)]
In phase III of the valve standard, the permittee may monitor valves for leaks as specified in paragraphs (c)(2)(i) or (c)(2)(ii) of 40 CFR 63.648.

(i) [40 CFR 63.648(c)(2)(i)]
If the permittee does not elect to monitor connectors, then the permittee shall monitor valves according to the frequency specified in table 8 of 40 CFR Part 63, Subpart CC [See section A.VI].

(ii) [40 CFR 63.648(c)(2)(ii)]
If the permittee elects to monitor connectors according to the provisions of 40 CFR 63.649, paragraphs (b), (c), or (d), then the permittee shall monitor valves at the frequencies specified in table 9 of 40 CFR Part 63, Subpart CC [See section A.VI].

(c) [40 CFR 63.648(c)(3)]
The permittee shall decide no later than the first required monitoring period after the phase I compliance date specified in 40 CFR 63.640(h) [See section A.I] whether to calculate the percentage leaking valves on

a process unit basis or on a sourcewide basis. Once the permittee has decided, all subsequent calculations shall be on the same basis unless a permit change is made.

(d) [40 CFR 63.648(c)(4)]
The permittee shall decide no later than the first monitoring period after the phase III compliance date specified in 40 CFR 63.640(h) [See section A.I] whether to monitor connectors according to the provisions in 40 CFR 63.649, paragraphs (b), (c), or (d).

(e) [40 CFR 63.648(c)(5)]
Connectors in gas/vapor service or light liquid service are subject to the requirements for connectors in heavy liquid service in 40 CFR 63.169 of Subpart H of 40 CFR Part 63 (except for the agitator provisions). The leak definition for valves, connectors, and instrumentation systems subject to 40 CFR 63.169 is 1,000 parts per million.

(f) [40 CFR 63.648(c)(6)]
In phase III of the pump standard, except as provided in 40 CFR 63.648(c)(7), permittees that achieve less than 10 percent of light liquid pumps leaking or three light liquid pumps leaking, whichever is greater, shall monitor light liquid pumps monthly.

(g) [40 CFR 63.648(c)(7)]
Permittees that achieve less than 3 percent of light liquid pumps leaking or one light liquid pump leaking, whichever is greater, shall monitor light liquid pumps quarterly.

(h) [40 CFR 63.648(c)(8)]
The permittee may make the election described in 40 CFR 63.648(c)(3)and (c)(4) at any time except that any election to change after the initial election shall be treated as a permit modification according to the terms of 40 CFR Part 70.

(i) [40 CFR 63.648(c)(9)]
When complying with the requirements of 40 CFR 63.168(e)(3)(i), non-repairable valves shall be included in the calculation of percent leaking valves the first time the valve is identified as leaking and non-repairable. Otherwise, a number of non-repairable valves up to a maximum of 1 percent per year of the total number of valves in organic HAP service up to a maximum of 3 percent may be excluded from calculation of percent leaking valves for subsequent monitoring periods. When the number of non-repairable valves exceeds 3 percent of the total number of valves in organic HAP service, the number of non-repairable valves exceeding 3 percent of the total number shall be included in the calculation of percent leaking valves.

(j) [40 CFR 63.648(c)(10)]
If in phase III of the valve standard any valve is designated as being leakless, the permittee has the option of following the provisions of 40 CFR 60.482-7(f). If the permittee chooses to comply with the provisions of 40 CFR 60.482-7(f), the valve is exempt from the valve monitoring provisions of 40 CFR 63.168 of Subpart H of 40 CFR Part 63.

iii. [63.648(d)]
Upon startup of new sources, the permittee shall comply with 40 CFR 63.163(a)(1)(ii) of Subpart H of 40 CFR Part 63 for light liquid pumps and 40 CFR 63.168(a)(1)(ii) for gas/vapor and light liquid valves.

iv. [63.648(e)]
For reciprocating pumps in heavy liquid service and agitators in heavy liquid service, permittees are not required to comply with the requirements in 40 CFR 63.169.

v. [63.648(f)]
Reciprocating pumps in light liquid service are exempt from 40 CFR 63.163 and 60.482 if recasting the distance piece or reciprocating pump replacement is required.

vi. [63.648(g)]
Compressors in hydrogen service are exempt from the requirements of 40 CFR 63.648(a) and (c) if the permittee demonstrates that a compressor is in hydrogen service.

(a) [63.648(g)(1)]
Each compressor is presumed not to be in hydrogen service unless the permittee demonstrates that the piece of equipment is in hydrogen service.

(b) [63.648(g)(2)]
For a piece of equipment to be considered in hydrogen service, it must be determined that the percentage hydrogen content can be reasonably expected always to exceed 50 percent by volume.

(i) [63.648(g)(2)(i)]
For purposes of determining the percentage hydrogen content in the process fluid that is contained in or contacts a compressor, the permittee shall use either:

(aa) [63.648(g)(2)(i)(A)]
Procedures that conform to those specified in 40 CFR 60.593(b)(2) of 40 part 60, Subpart GGG.

(bb) [63.648(g)(2)(i)(B)]
Engineering judgment to demonstrate that the percentage content exceeds 50 percent by volume, provided the engineering judgment demonstrates that the content clearly exceeds 50 percent by volume.

(aaa) [63.648(g)(2)(i)(B)(1)]
When the permittee and the Administrator do not agree on whether a piece of equipment is in hydrogen service, the procedures in 40 CFR 63.648(g)(2)(i)(A) shall be used to resolve the disagreement.

(bbb) [63.648(g)(2)(i)(B)(2)]
If the permittee determines that a piece of equipment is in hydrogen service, the determination can be revised only by following the procedures in 40 CFR 63.648(g)(2)(i)(A).

vii. [63.648(h)]
Each permittee of a source subject to the provisions of 40 CFR Part 63, Subpart CC must maintain all records for a minimum of 5 years.

viii. [63.648(i)]
Reciprocating compressors are exempt from seal requirements if recasting the distance piece or compressor replacement is required.

b. 40 CFR 63.649 Alternative means of emission limitation: Connectors in gas/vapor service and light liquid service.

i. [63.649(a)]
If an permittee elects to monitor valves according to the provisions of 40 CFR 63.648(c)(2)(ii), the permittee shall implement one of the connector monitoring programs specified in paragraphs (b), (c), or (d) of 40 CFR 63.649.

ii. [63.649(b)]
Random 200 connector alternative. The permittee shall implement a random sampling program for accessible connectors of 2.0 inches nominal diameter or greater. The program does not apply to inaccessible or unsafe-to-monitor connectors, as defined in 40 CFR 63.174 of Subpart H. The sampling program shall be implemented source-wide.

(a) [63.649(b)(1)]
Within the first 12 months after the phase III compliance date specified in 40 CFR 63.640(h), a sample of 200 connectors shall be randomly selected and monitored using Method 21 of 40 CFR part 60, Appendix A.

(b) [63.649(b)(2)]
The instrument reading that defines a leak is 1,000 parts per million.

(c) [63.649(b)(3)]
When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected except as provided in paragraph (e) of 40 CFR 63.649. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

(d) [63.649(b)(4)]
If a leak is detected, the connector shall be monitored for leaks within the first 3 months after its repair.

(e) [63.649(b)(5)]
After conducting the initial survey required in paragraph (b)(1) of 40 CFR 63.649, the permittee shall conduct subsequent monitoring of connectors at the frequencies specified in paragraphs (b)(5)(i) through (b)(5)(iv) of 40 CFR 63.649.

(i) [63.649(b)(5)(i)]
If the percentage leaking connectors is 2.0 percent or greater, the permittee shall survey a random sample of 200 connectors once every 6 months.

(ii) [63.649(b)(5)(ii)]
If the percentage leaking connectors is 1.0 percent or greater but less than 2.0 percent, the permittee shall survey a random sample of 200 connectors once per year.

(iii) [63.649(b)(5)(iii)]
If the percentage leaking connectors is 0.5 percent or greater but less than 1.0 percent, the permittee shall survey a random sample of 200 connectors once every 2 years.

(iv) [63.649(b)(5)(iv)]
If the percentage leaking connectors is less than 0.5 percent, the permittee shall survey a random sample of 200 connectors once every 4 years.

(f) [63.649(b)(6)]
Physical tagging of the connectors to indicate that they are subject to the monitoring provisions is not required. Connectors may be identified by the area or length of pipe and need not be individually identified.

iii. [63.649(c)]

Connector inspection alternative. The permittee shall implement a program to monitor all accessible connectors in gas/vapor service that are 2.0 inches (nominal diameter) or greater and inspect all accessible connectors in light liquid service that are 2 inches (nominal diameter) or greater as described in paragraphs (c)(1) through (c)(7) of 40 CFR 63.649. The program does not apply to inaccessible or unsafe-to-monitor connectors.

(a) [63.649(c)(1)]
Within 12 months after the phase III compliance date specified in 40 CFR 63.640(h), all connectors in gas/vapor service shall be monitored using Method 21 of 40 CFR part 60 Appendix A. The instrument reading that defines a leak is 1,000 parts per million.

(b) [63.649(c)(2)]
All connectors in light liquid service shall be inspected for leaks. A leak is detected if liquids are observed to be dripping at a rate greater than three drops per minute.

(c) [63.649(c)(3)]
When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected except as provided in paragraph (e) of 40 CFR 63.649. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

(d) [63.649(c)(4)]
If a leak is detected, connectors in gas/vapor service shall be monitored for leaks within the first 3 months after repair. Connectors in light liquid service shall be inspected for indications of leaks within the first 3 months after repair. A leak is detected if liquids are observed to be dripping at a rate greater than three drops per minute.

(e) [63.649(c)(5)]
After conducting the initial survey required in paragraphs (c)(1) and (c)(2) of 40 CFR 63.649, the permittee shall conduct subsequent monitoring at the frequencies specified in paragraphs (c)(5)(i) through (c)(5)(iii) of 40 CFR 63.649.

(i) [63.649(c)(5)(i)]
If the percentage leaking connectors is 2.0 percent or greater, the permittee shall monitor or inspect, as applicable, the connectors once per year.

(ii) [63.649(c)(5)(ii)]
If the percentage leaking connectors is 1.0 percent or greater but less than 2.0 percent, the permittee shall monitor or inspect, as applicable, the connectors once every 2 years.

(iii) [63.649(c)(5)(iii)]
If the percentage leaking connectors is less than 1.0 percent, the permittee shall monitor or inspect, as applicable, the connectors once every 4 years.

(f) [63.649(c)(6)]
The percentage leaking connectors shall be calculated for connectors in gas/vapor service and for connectors in light liquid service. The data for the two groups of connectors shall not be pooled for the purpose of determining the percentage leaking connectors.

(i) [63.649(c)(6)(i)]
The percentage leaking connectors shall be calculated as follows:

% CL = [(CL - CAN) / Ct + Cc)] x 100

where:

% CL = Percentage leaking connectors.
CL = Number of connectors including nonrepairables, measured at 1,000 parts per million or greater, by Method 21 of 40 CFR part 60, Appendix A.
CAN = Number of allowable nonrepairable connectors, as determined by monitoring, not to exceed 3 percent of the total connector population, Ct.
Ct = Total number of monitored connectors, including nonrepairables, in the process unit.
Cc = Optional credit for removed connectors=0.67xnet number (i.e., the total number of connectors removed minus the total added) of connectors in organic HAP service removed from the process unit after the applicability date set forth in 40 CFR 63.640(h)(4)(iii) for existing process units, and after the date of start-up for new process units. If credits are not taken, then Cc=0.

(ii) [63.649(c)(6)(ii)]
Nonrepairable connectors shall be included in the calculation of percentage leaking connectors the first time the connector is identified as leaking and nonrepairable. Otherwise, a number of nonrepairable connectors up to a maximum of 1 percent per year of the total number of connectors in organic HAP service up to a maximum of 3 percent may be excluded from calculation of percentage leaking connectors for subsequent monitoring periods.

(iii) [63.649(c)(6)(iii)]

If the number of nonrepairable connectors exceeds 3 percent of the total number of connectors in organic HAP service, the number of nonrepairable connectors exceeding 3 percent of the total number shall be included in the calculation of the percentage leaking connectors.

(g) [63.649(c)(7)]
Physical tagging of the connectors to indicate that they are subject to the monitoring provisions is not required. Connectors may be identified by the area or length of pipe and need not be individually identified.

iv [63.649(d)]
Subpart H program. The permittee shall implement a program to comply with the provisions in 40 CFR 63.174.

v. [63.649(e)]
Delay of repair of connectors for which leaks have been detected is allowed if repair is not technically feasible by normal repair techniques without a process unit shutdown. Repair of this equipment shall occur by the end of the next process unit shutdown.

(a) [63.649(e)(1)]
Delay of repair is allowed for equipment that is isolated from the process and that does not remain in organic HAP service.

(b) [63.649(e)(2)]
Delay of repair for connectors is also allowed if:

(i) [63.649(e)(2)(i)]
The permittee determines that emissions of purged material resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair, and

(ii) [63.649(e)(2)(ii)]
When repair procedures are accomplished, the purged material would be collected and destroyed or recovered in a control device.

vi. [63.649(f)]
Any connector that is designated as an unsafe-to-repair connector is exempt from the requirements of paragraphs (b)(3) and (b)(4), (c)(3) and (c)(4), or (d) of 40 CFR 63.649 if:

(a) [63.649(f)(1)]

The permittee determines that repair personnel would be exposed to an immediate danger as a consequence of complying with paragraphs (b)(3) and (b)(4), (c)(3) and (c)(4), of 40 CFR 63.649; or

(b) [63.649(f)(2)]
The connector will be repaired before the end of the next scheduled process unit shutdown.

vii. [63.649(g)]
The permittee shall maintain records to document that the connector monitoring or inspections have been conducted as required and to document repair of leaking connectors as applicable.

c. [63.637(c)] WASTEWATER PROVISIONS - 40 CFR Part 63, Subpart CC
Each permittee required under 40 CFR Part 61, Subpart FF to perform periodic measurement of benzene concentration in wastewater, or to monitor process or control device operating parameters shall operate in a manner consistent with the minimum or maximum (as appropriate) permitted concentration or operating parameter values. Operation of the process, treatment unit, or control device resulting in a measured concentration or operating parameter value outside the permitted limits shall constitute a violation of the emission standards. Failure to perform required leak monitoring for closed vent systems and control devices or failure to repair leaks within the time period specified in 40 CFR Part 61, Subpart FF shall constitute a violation of the standard.

d. [63.643(b)] MISCELLANEOUS PROCESS VENT PROVISIONS - 40 CFR Part 63, Subpart CC
If a boiler or process heater is used to comply with the percentage of reduction requirement or concentration limit specified in 40 CFR 63.643(a)(2) [See section A.II], then the vent stream shall be introduced into the flame zone of such a device, or in a location such that the required percent reduction or concentration is achieved. Testing and monitoring is required only as specified in 40 CFR 63.644(a) [See sections A.III and A.V] and 40 CFR 63.645.

e. [63.643(a)] MISCELLANEOUS PROCESS VENT PROVISIONS - 40 CFR Part 63, Subpart CC

The permittee of a Group 1 miscellaneous process vent as defined in 40 CFR 63.641 shall comply with the requirements of either 40 CFR 63.643(a)(1) or (a)(2) [See section A.II.].

i. [63.643(a)(1)]
Reduce emissions of organic HAP's using a flare that meets the requirements of 40 CFR 63.11(b) of Subpart A.

ii. [63.643(a)(2)]

Reduce emissions of organic HAP's, using a control device, by 98 weight-percent or to a concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent. Compliance can be determined by measuring either organic HAP's or TOC's using the procedures in 40 CFR 63.645.

f. [63.11(b)] Flares

i. [63.11(b)(1)]
Permittees using flares to comply with the provisions of 40 CFR Part 63 shall monitor these control devices to assure that they are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how permittees using flares shall monitor these control devices.

ii. [63.11(b)(2)]
Flares shall be steam-assisted, air-assisted, or non-assisted.

iii. [63.11(b)(3)]
Flares shall be operated at all times when emissions may be vented to them.

iv. [ 63.11(b)(4)]
Flares shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. Test Method 22 in Appendix A of 40 CFR Part 60 shall be used to determine the compliance of flares with the visible emission provisions of 40 CFR part 63. The observation period is 2 hours and shall be used according to Method 22.

v. [ 63.11(b)(5)]
Flares shall be operated with a flame present at all times. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

vi. [63.11(b)(6)]
The permittee has the choice of adhering to the heat content specifications in 40 CFR 63.11(b)(6)(ii) [See section A.II.], and the maximum tip velocity specifications in 40 CFR 63.11(b)(7) or (b)(8) [See section A.II], or adhering to the requirements in 40 CFR 63.11(b)(6)(i) [See section A.II].

(a) [63.11(b)(6)(i)]
Flares shall be used that have a diameter of 3 inches or greater, are nonassisted, have a hydrogen content of 8.0 percent (by volume) or greater, and are designed for and operated with an exit velocity less than 37.2 m/sec (122 ft/sec) and less than the velocity $V_{max}$, as determined by the following equation:

$$V_{max} = (X_{H2} - K_1) * K_2$$

Where:
$V_{max}$ = Maximum permitted velocity, m/sec;
$K_1$ = Constant, 6.0 volume-percent hydrogen;
$K_2$ = Constant, 3.9(m/sec)/volume-percent hydrogen; and
$X_{H2}$ = The volume-percent of hydrogen, on a wet basis, as calculated by using the American Society for Testing and Materials (ASTM) Method D1946-77. (Incorporated by reference as specified in 40 CFR 63.14).

(i) [63.11(b)(6)(i)(B)]
The actual exit velocity of a flare shall be determined by the method specified in 63.11(b)(7)(i) [See section A.II of Part II].

(b) [63.11(b)(6)(ii)]
Flares shall be used only with the net heating value of the gas being combusted at 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted at 7.45 M/scm (200 Btu/scf) or greater if the flare is non-assisted. The net heating value of the gas being combusted in a flare shall be calculated using the equation contained in 40 CFR 63.11(b)(6)(ii).

vii. [63.11(b)(7)(i)]
Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity less than 18.3 m/sec (60 ft/sec), except as provided in 63.11(b)(7)(ii) and (b)(7)(iii) [See section A.II. in Part II]. The actual exit velocity of a flare shall be determined by dividing by the volumetric flow rate of gas being combusted (in units of emission standard temperature and pressure), as determined by Test Methods 2, 2A, 2C, or 2D in Appendix A to 40 CFR part 60, as appropriate, by the unobstructed (free) cross-sectional area of the flare tip.

(a) [63.11(b)(7)(ii)]
Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the method specified in 653.11(b)(7)(i) [See section A.II in Part II], equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec), are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

(b) [63.11(b)(7)(iii)]
Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the method specified in 40 CFR 63.11(b)(7)(i) [See section A.II], less than the velocity $V_{max}$, as determined by the method specified in this paragraph, but less than 122 m/sec (400 ft/sec) are allowed. The maximum permitted velocity, $V_{max}$, for flares complying with this paragraph shall be determined by the following equation:

$Log_{10}(V_{max}) = (H_T+28.8)/31.7$

where:

$V_{max}$ = Maximum permitted velocity, m/sec;
28.8 = Constant;
31.7 = Constant; and
$H_T$ = The net heating value as determined in 40 CFR 63.11(b)(6) [see A.II.].

viii. [63.11(b)(8)]
Air-assisted flares shall be designed and operated with an exit velocity less than the velocity $V_{max}$. The maximum permitted velocity, $V_{max}$, for air-assisted flares shall be determined by the following equation:

$V_{max}=8.71 + 0.708(H_T)$

where:

$V_{max}$ = Maximum permitted velocity, m/sec;
8.71 = Constant;
0.708 = Constant; and
$H_T$ = The net heating value as determined in 40 CFR 63.11(b)(6)(ii).

2. 40 CFR Part 60, Subpart VV

a. [60.482-1] STANDARDS: GENERAL

i. [60.482-1(a)]
Each permittee subject to the provisions of 40 CFR Part 60, Subpart VV shall demonstrate compliance with the requirements of 60.482-1 to 60.482-10 [See section A.II.] for all equipment within 180 days of initial startup.

ii. [60.482-1(b)]
Compliance with 60.482-1 to 60.482-10 [See section A.II.] will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in 60.485 [See section A.V.].

iii. (a) [60.482-1(c)(1)]
The permittee may request a determination of equivalence of a means of emission limitation to the requirements of 60.482-2, 60.482-3, 60.482-5, 60.482-6, 60.482-7, 60.482-8 and 60.482-10 [See section A.II.] as provided in 40 CFR 60.484.

(b) [60.482-1(c)(2)]

If the Administrator makes a determination that a means of emission limitation is at least equivalent to the requirements of 60.482-2, 60.482-3, 60.482-5, 60.482-6, 60.482-7, 60.482-8 and 60.482-10 [See section A.II.], the permittee shall comply with the requirements of that determination.

iv. [60.482-1(d)]
Equipment that is in vacuum service is excluded from the requirements of 60.482-2 to 60.482-10 [See section A.II.] if it is identified as required in 60.486(e)(5) [See section A.III.].

b. [60.482-2] STANDARDS: PUMPS IN LIGHT LIQUID SERVICE - 40 CFR Part 60, Subpart VV

i. (a) [60.482-2(a)(1)]
Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in 60.485(b) [See section A.V.], except as provided in 60.482-1(c) [See section A.II.] and paragraphs d., e., and f. of 40 CFR 60.482-2.

(b) [60.482-2(a)(2)]
Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

ii. (a) [60.482-2(b)(1)]
If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(b) [60.482-2(b)(2)]
If there are indications of liquids dripping from the pump seal, a leak is detected.

iii. (a) [60.482-2(c)(1)]
When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 60.482-9 [See section A.II.].

(b) [60.482-2(c)(2)]
A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

iv. [60.482-2(d)]
Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 40 CFR 60.482-2(a), provided the following requirements are met:

(a) [60.482-2(d)(1)]
Each dual mechanical seal system is:

(i) [60.482-2(d)(1)(i)]
operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or

(ii) [60.482-2(d)(1)(ii)]
equipped with a barrier fluid degassing reservoir that is connected by a closed vent system to a control device that complies with the requirements of 60.482-10 [See section A.II.]; or

(iii) [60.482-2(d)(1)(iii)]
equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.

(b) [60.482-2(d)(2)]
The barrier fluid system is in heavy liquid service or is not in VOC service.

(c) [60.482-2(d)(3)]
Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.

(d) [60.482-2(d)(4)]
Each pump is checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.

(e) (i) [60.482-2(d)(5)(i)]
Each sensor as described in paragraph (d)(3) is checked daily or is equipped with an audible alarm, and

(ii) [60.482-2(d)(5)(ii)]
The permittee determines, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(f) (i) [60.482-2(d)(6)(i)]
If there are indications of liquids dripping from the pump seal or the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined in 40 CFR 60.482-2(d)(5)(ii), a leak is detected.

(ii) [60.482-2(d)(6)(ii)]

When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 60.482-9 [See section A.II.].

(iii) [60.482-2(d)(6)(iii)]
A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

v. [60.282-2(e)]
Any pump that is designated, as described in 60.486(e)(1) and (2) [See section A.III.], for no detectable emission, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs (a), (c), and (d) 40 CFR 60.482-2 if the pump:

(a) [60.482-2(e)(1)]
has no externally actuated shaft penetrating the pump housing;

(b) [60.482-2(e)(2)]
is demonstrated to be operating with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in 60.485(c) [See section A.V.]; and

(c) [60.482-2(e)(3)]
is tested for compliance with paragraph (e)(ii) of 40 CFR 60.482-2 initially upon designation, annually, and at other times requested by the Administrator.

vi. [60.482-2(f)]
If any pump is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a process or to a fuel gas system or a control device that complies with the requirements of 60.482-10 [See section A.II.], it is exempt from paragraphs (a) through (e) of 40 CFR 60.482-2.

vii. [60.482-2(g)]
Any pump that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of paragraphs (a) and (d)(4) through (6) of 40 CFR 60.482-2 if:

(a) [60.482-2(g)(1)]
The permittee of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a) of 40 CFR 60.482-2; and

(b) [60.482-2(g)(2)]

The permittee of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR 60.482-2(c) if a leak is detected.

viii. [60.482-2(h)]
Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of paragraphs (a)(2) and (d)(4) of 40 CFR 60.482-2, and the daily requirements of paragraph (d)(5) of 60.482-2, provided that each pump is visually inspected as often as practicable and at least monthly.

c. [60.482-3] STANDARDS: COMPRESSORS - 40 CFR Part 60, Subpart VV

i. [60.482-3(a)]
Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in 60.482-1(c) [See section A.II.] and paragraphs (h) and (i) of 40 CFR 60.482-3.

ii. [60.482-3(b)]
Each compressor seal system as required in 40 CFR 60.482-3(a) shall be:

(a) [60.482-3(b)(1)]
operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or

(b) [60.482-3(b)(2)]
equipped with a barrier fluid system that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of 60.482-10 [See section A.II.]; or

(c) [60.482-3(b)(3)]
equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.

iii. [60.482-3(c)]
The barrier fluid system shall be in heavy liquid service or shall not be in VOC service.

iv. [60.482-3(d)]
Each barrier fluid system as described in 40 CFR 60.482-3(a) shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.

v. (a) [60.482-3(e)(1)]
Each sensor as required in paragraph 40 CFR 60.482-3(d) shall be checked daily or shall be equipped with an audible alarm.

(b) [60.482-3(e)(2)]
The permittee shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

vi. [60.482-3(f)]
If the sensor indicates failure of the seal system, the barrier system, or both based on the criterion determined under 40 CFR 60.482-3(e)(2)., a leak is detected.

vii. (a) [60.482-3(g)(1)]
When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 60.482-9 [See section A.II.].

(b) [60.482-3(g)(2)]
A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

viii. [60.482-3(h)]
A compressor is exempt from the requirements of paragraphs (a) and (b) of 40 CFR 60.482-3, if it is equipped with a closed vent system capable of capturing and transporting any leakage from the seal to a control device that complies with the requirements of 60.482-10 [See section A.II.], except as provided in 40 CFR 60.482-3(i).

ix. [60.482-3(i)]
Any compressor that is designated, as described in 60.486(e)(1) and (2) [See section A.III.], for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs (a) through (h) of 40 CFR 60.482-3 if the compressor:

(a) [60.482-3(i)(1)]
is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the methods specified in 60.485(c) [See section A.V.]; and

(b) [60.482-3(i)(2)]
is tested for compliance with 40 CFR 60.482-3(i)(1), initially upon designation, annually, and at other times requested by the Administrator.

x. [60.482-3(j)]
Any existing reciprocating compressor in a process unit which becomes an affected facility under provisions of 60 CFR 60.14 or 60.15 is exempt from 60.482-3(a), (b), (c), (d), (e), and (h) [See section A.II.], provided the permittee demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of paragraphs (a) through (e) and (h) of 40 CFR 60.482-3.

d. [60.482-4] STANDARDS: PRESSURE RELIEF DEVICES IN GAS/VAPOR SERVICE

i. [60.482-4(a)]
Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in 60.485(c) [See section A.V.].

ii. (a) [60.482-4(b)(1)]
After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in 60.482-9 [See section A.II.].

(b) [60.482-4(b)(2)]
No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in 60.485(c) [See section A.V.].

iii. [60.482-4(c)]
Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in 60.482-10 [See section A.II.] is exempted from the requirements of paragraphs (a) and (b) of 40 CFR 60.482-4.

iv. (a) [60.482-4(d)(1)]
Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of paragraphs (a) and (b) of 40 CFR 60.482-4(d), provided the permittee complies with the requirements in paragraph 40 CFR 61.482-4(d)(2).

(b) [60.482-4(d)(2)]

After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 60.482-9.

e. [60.482-5] STANDARDS: SAMPLING CONNECTION SYSTEMS - 40 CFR Part 60, Subpart VV

i. [60.482-5(a)]
Each sampling connection system shall be equipped with a closed-purged, closed-loop, or closed-vent system, except as provided in 60.482-1(c) [See section A.II.]. Gases displaced during filling of the sample container are not required to be collected or captured.

ii. [60.482-5(b)]
Each closed-purge, closed-loop, or closed-vent system as required in 40 CFR 60.482-5(a) shall comply with the requirements specified in paragraphs b(1) through (b)(iv) of 40 CFR 60.482-5:

(a) [60.482-5(b)(1)]
return the purged process fluid directly to the process line; or

(b) [60.482-5(b)(2)]
collect and recycle the purged process fluid to a process; or

(c) [60.482-5(b)(3)]
be designed and operated to capture and transport all the purged process fluid to a control device that complies with the requirements of 60.482-10 [See section A.II.].

(d) [60.482-5(b)(4)]
Collect, store, and transport the purged process fluid to any of the following systems or facilities:

(i) [60.482-5(b)(4)(i)]
A waste management unit as defined in 40 CFR 63.111, if the waste management unit is subject to, and operated in compliance with the provisions of 40 CFR part 63, Subpart G, applicable to Group 1 wastewater streams;

(ii) [60.482-5(b)(4)(ii)]
A treatment, storage, or disposal facility subject to regulation under 40 CFR part 262, 264, 265, or 266; or

(iii) [60.482-5(b)(4)(iii)]

A facility permitted, licensed, or registered by a State to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 CFR part 261.

iii. [60.482-5(c)]
In situ sampling systems and sampling systems without purges are exempt from the requirements of paragraphs (a) and (b) of 40 CFR 60.482-5.

f. [60.482-6] STANDARDS: OPEN-ENDED VALVES OR LINES - 40 CFR Part 60, Subpart VV

i. (a) [60.482-6(a)(1)]
Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 60.482-1(c) [See section A.II.].

(b) [60.482-6(a)(2)]
The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.

ii. [60.482-6(b)]
Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.

iii. [60.482-6(c)]
When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves, but shall comply with 40 CFR 60.482-6(a) at all other times.

iv. [60.482-6(d)]
Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of paragraphs (a), (b) and (c) of 40CFR 60.482-6.

v. [60.482-6(e)]
Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in paragraphs (a) through (c) of 40 CFR 60.482-6 are exempt from the requirements of paragraphs (a) through (c) of 40 CFR 60.482-6.

g. [60.482-7] STANDARDS: VALVES IN GAS/VAPOR SERVICE AND IN LIGHT LIQUID SERVICE - 40 CFR Part 60, Subpart VV

i. [60.482-7(a)]

Each valve shall be monitored monthly to detect leaks by the methods specified in 60.485(b) [See section A.V.] and shall comply with paragraphs (b) through (e) of 40 CFR 60.482-7, except as provided in paragraphs 40 CFR 60.482-7(f), (g), and (h), 60.483-1, 60.483-2, and 60.482-1(c) [See section A.II.].

ii. [60.482-7(b)]
If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

iii. (a) [60.482-7(c)(1)]
Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.

(b) [60.482-7(c)(2)]
If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.

iv. (a) [60.482-7(d)(1)]
When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 60.482-9 [See section A.II.].

(b) [60.482-7(d)(2)]
A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

v. [60.482-7(e)]
First attempts at repair include, but are not limited to, the following best practices where practicable:

(a) [60.482-7(e)(1)]
tightening of bonnet bolts;

(b) [60.482-7(e)(2)]
replacement of bonnet bolts;

(c) [60.482-7(e)(3)]
tightening of packing gland nuts; and

(d) [60.482-7(e)(4)]
injection of lubricant into lubricated packing.

vi. [60.482-7(f)]

Any valve that is designated, for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-7(a) if the valve:

(a) [60.482-7(f)(1)]
has no external actuating mechanism in contact with the process fluid;

(b) [60.482-7(f)(2)]
is operated with emissions less than 500 ppm above background as determined by the method specified in 60.485(c) [See section A.V.]; and

(c) [60.482-7(f)(3)]
is tested for compliance with paragraph 40 CFR 60.482-7(f)(2) initially upon designation, annually, and at other times requested by the Director and/or Administrator.

vii. [60.482-7(g)]
Any valve that is designated, as described in 60.486(f)(1) [See section A.III.], as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(a) if:

(a) [60.482-7(g)(1)]
the permittee of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR 60.482-7(a); and

(b) [60.482-7(g)(2)]
the permittee of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.

viii. [60.482-7(h)]
Any valve that is designated, as described in 60.486(f)(2) [See section A.III.], as a difficult-to-monitor valve is exempt from the requirements of 40 CFR 60.482-7(a) if:

(a) [60.482-7(h)(1)]
the permittee of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface;

(b) [60.482-7(h)(2)]
the process unit within which the valve is located either becomes an affected facility through 40 CFR 60.14 or 60.15 or the permittee

designates less than 3.0 percent of the total number of valves as difficult-to-monitor; and

(c) [60.482-7(h)(3)]
the permittee of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

h. [60.482-8] STANDARDS: PUMPS AND VALVES IN HEAVY LIQUID SERVICE, PRESSURE RELIEF DEVICES IN LIGHT LIQUID OR HEAVY LIQUID SERVICE, AND CONNECTORS - 40 CFR Part 60, Subpart VV

i. [60.482-8(a)]
If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, the permittee shall follow either one of the following procedures:

(a) [60.482-8(a)(1)]
The permittee shall monitor the equipment within 5 days by the method specified in 40 CFR 60.485(b) and shall comply with the requirements of paragraphs (b) through (d) of 40 CFR 60.482-8.

(b) [60.482-8(a)(2)]
The permittee shall eliminate the visual, audible, olfactory, or other indication of a potential leak.

ii. [60.482-8(b)]
If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

iii. (a) [60.482-8(c)(1)]
When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 60.482-9 [See section A.II.].

(b) [60.482-8(c)(2)]
The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

iv. [60.482-8(d)]
First attempts at repair include, but are not limited to, the best practices described under 60.482-7(e) [See section A.II.].

i. [60.482-9] STANDARDS: DELAY OF REPAIR - 40 CFR Part 60, Subpart VV

i. [60.482-9(a)]

Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.

ii. [60.482-9(b)]
Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service.

iii. [60.482-9(c)]
Delay of repair for valves will be allowed if:

(a) [60.482-9(c)(1)]
the permittee demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair; and

(b) [60.482-9(c)(2)]
when repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 60.482-10 [See section A.II.].

iv. [60.482-9(d)]
Delay of repair for pumps will be allowed if:

(a) [60.482-9(d)(1)]
repair requires the use of a dual mechanical seal system that includes a barrier fluid system; and

(b) [60.482-9(d)(2)]
repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

v. [60.482-9(e)]
Delay of repair beyond a process unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

j. [60.482-10] STANDARDS: CLOSED VENT SYSTEMS AND CONTROL DEVICES - 40 CFR Part 60, Subpart VV

i. [60.482-10(a)]

Permittees of closed vent systems and control devices used to comply with provisions of 40 CFR Part 60, Subpart VV shall comply with the provisions of this paragraph and the record keeping for closed vent systems found in section A.III.

ii. [60.482-10(b)]
Vapor recovery systems (for example, condensers and absorbers) shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent.

iii. [60.482-10(c)]
Enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 °C.

iv. [60.482-10(d)]
Flares used to comply with 40 CFR Part 60, Subpart VV shall comply with the requirements of 40 CFR 60.18.

v. [60.482-10(e)]
Permittees of control devices used to comply with the provisions of 40 CFR Part 60, Subpart VV shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs.

vi. [60.482-10(f)]
Except as provided in paragraphs i. through k. of 40 CFR 60.482-10, each closed vent system shall be inspected according to the procedures and schedule specified in paragraphs (f)(1) and (f)(2) of 40 CFR 60.482-10.

(a) [60.482-10(f)(1)]
If the vapor collection system or closed vent system is constructed of hard-piping, the permittee shall comply with the following requirements:

(i) [60.482-10(f)(1)(i)]
Conduct an initial inspection according to the procedures in 60.485(b) [See section A.V.]; and

(ii) [60.482-10(f)(1)(ii)]
Conduct annual visual inspections for visible, audible, or olfactory indications of leaks.

(b) [60.482-10(f)(2)]

If the vapor collection system or closed vent system is constructed of ductwork, the permittee shall:

(i) [60.482-10(f)(2)(i)]
Conduct an initial inspection according to the procedures in 60.485(b) [See section A.V.]; and

(ii) [60.482-10(f)(2)(ii)]
Conduct annual inspections according to the procedures in 60.485(b) [See section A.V.].

vii. [60.482-10(g)]
Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in 40 CFR 60.482-10(h).

(a) [60.482-10(g)(1)]
A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

(b) [60.482-10(g)(2)]
Repair shall be completed no later than 15 calendar days after the leak is detected.

viii. [60.482-10(h)]
Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the permittee determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown.

ix. [60.482-10(i)]
If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of paragraphs (f)(1)(i) and (f)(2) of 40 CFR 60.482-10.

x. [60.482-10(j)]
Any parts of the closed vent system that are designated, as described in 60.482-10(l)(1) [See section A.III.], as unsafe to inspect are exempt from the inspection requirements of paragraphs (f)(1)(i) and (f)(2) of 40 CFR 60.482-10 if they comply with the requirements specified in 40 CFR 60.482-10( j)(1) and (j)(2):

(a) [60.482-10(j)(1)]
the permittee determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or

potential danger as a consequence of complying with paragraphs (f)(1)(i) or (f)(2) of 40 CFR 60.482-10; and

(b) [60.482-10(j)(2)]
the permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.

xi. [60.482-10(k)]
Any parts of the closed vent system that are designated, as described in 60.482-10(l)(2) [See section A.III.], as difficult to inspect are exempt from the inspection requirements of paragraphs (f)(1)(i) and (f)(2) of 40 CFR 60.482-10 if they comply with the requirements specified in 40 CFR 60.482-10(k)(1) through (k)(3):

(a) [60.482-10(k)(1)]
the permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and

(b) [60.482-10(k)(2)]
the process unit within which the closed vent system is located becomes an affected facility through 40 CFR 60.14 or 60.15, or the permittee designates less than 3.0 percent of the total number of closed vent system equipment as difficult to inspect; and

(c) [60.482-10(k)(3)]
the permittee has a written plan that requires inspection of the equipment at least once every 5 years. A closed vent system is exempt from inspection if it is operated under a vacuum.

xii. [60.482-10(m)]
Closed vent systems and control devices used to comply with provisions of 40 CFR Part 60, Subpart VV shall be operated at all times when emissions may be vented to them.

k. [60.483-1] ALTERNATIVE STANDARDS FOR VALVES - ALLOWABLE PERCENTAGE OF VALVES LEAKING - 40 CFR Part 60, Subpart VV

i. [60.483-1(a)]
The permittee may elect to comply with an allowable percentage of valves leaking of equal to or less than 2.0 percent.

ii. [60.483-1(b)]
The following requirements shall be met if the permittee wishes to comply with an allowable percentage of valves leaking:

(a) [60.483-1(b)(1)]

The permittee must notify the Administrator that the permittee has elected to comply with the allowable percentage of valves leaking before implementing this alternative standard, as specified in 60.487(d) [See section A.II.].

(b) [60.483-1(b)(2)]
A performance test as specified in 40 CFR 60.483-1(c) shall be conducted initially upon designation, annually, and at other times requested by the Administrator.

(c) [60.483-1(b)(3)]
If a valve leak is detected, it shall be repaired in accordance with 60.482-7(d) and (e) [See section A.II.].

iii. [60.483-1(c)]
Performance tests shall be conducted in the following manner:

(a) [60.483-1(c)(1)]
All valves in gas/vapor and light liquid service within the affected facility shall be monitored within 1 week by the methods specified in 60.485(b) [See section A.V.].

(b) [60.483-1(c)(2)]
If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(c) [60.483-1(c)(3)]
The leak percentage shall be determined by dividing the number of valves for which leaks are detected by the number of valves in gas/vapor and light liquid service within the affected facility.

iv. [60.483-1(d)]
Permittees who elect to comply with this alternative standard shall not have an affected facility with a leak percentage greater than 2.0 percent.

l. [60.483-2] ALTERNATIVE STANDARDS FOR VALVES - SKIP PERIOD LEAK DETECTION AND REPAIR - 40 CFR Part 60, Subpart VV

i. (a) [60.483-2(a)(1)]
The permittee may elect to comply with one of the alternative work practices specified in paragraphs (b)(2) and (b)(3) of 40 CFR 60.483-2.

(b) [60.483-2(a)(2)]
The permittee must notify the Administrator before implementing one of the alternative work practices, as specified in 40 CFR 60.487(d).

ii. (a) [60.483-2(b)(1)]

The permittee shall comply initially with the requirements for valves in gas/vapor service and valves in light liquid service, as described in 60.482-7 [See section A.II.].

(b) [60.483-2(b)(2)]
After 2 consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, the permittee may begin to skip 1 of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.

(c) [60.483-2(b)(3)]
After 5 consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, the permittee may begin to skip 3 of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.

(d) [60.483-2(b)(4)]
If the percent of valves leaking is greater than 2.0, the permittee shall comply with the requirements as described in 60.482-7 [See section A.II.], but can again elect to use this section.

(e) [60.483-2(b)(5)]
The percent of valves leaking shall be determined by dividing the sum of valves found leaking during current monitoring and valves for which repair has been delayed by the total number of valves subject to the requirements of 40 CFR 60.483-2.

(f) [60.483-2(b)(6)]
The permittee must keep a record of the percent of valves found leaking during each leak detection period.

m. [60.484] EQUIVALENCE OF MEANS OF EMISSION LIMITATION - 40 CFR Part 60, Subpart VV

i. [60.484(a)]
Each permittee subject to the provisions of 40 CFR Part 60, Subpart VV may apply to the Administrator for determination of equivalence for any means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to the reduction in emissions of VOC achieved by the controls required in 40 CFR Part 60, Subpart VV.

ii. [60.484(b)]
Determination of equivalence to the equipment, design, and operational requirements of 40 CFR Part 60, Subpart VV will be evaluated by the following guidelines:

(a) [60.484(b)(1)]

Each permittee applying for an equivalence determination shall be responsible for collecting and verifying test data to demonstrate equivalence of means of emission limitation.

(b) [60.484(b)(2)]
The Administrator will compare test data for the means of emission limitation to test data for the equipment, design, and operational requirements.

(c) [60.484(b)(3)]
The Administrator may condition the approval of equivalence on requirements that may be necessary to assure operation and maintenance to achieve the same emission reduction as the equipment, design, and operational requirements.

iii. [60.484(c)]
Determination of equivalence to the required work practices in 40 CFR Part 60, Subpart VV will be evaluated by the following guidelines:

(a) [60.484(c)(1)]
Each permittee applying for a determination of equivalence shall be responsible for collecting and verifying test data to demonstrate equivalence of an equivalent means of emission limitation.

(b) [60.484(c)(2)]
For each affected facility for which a determination of equivalence is requested, the emission reduction achieved by the required work practice shall be demonstrated.

(c) [60.484(c)(3)]
For each affected facility, for which a determination of equivalence is requested, the emission reduction achieved by the equivalent means of emission limitation shall be demonstrated.

(d) [60.484(c)(4)]
Each permittee applying for a determination of equivalence shall commit in writing to work practice(s) that provide for emission reductions equal to or greater than the emission reductions achieved by the required work practice.

(e) [60.484(c)(5)]
The Administrator will compare the demonstrated emission reduction for the equivalent means of emission limitation to the demonstrated emission reduction for the required work practices and will consider the commitment in paragraph (c)(4).

(f) [60.484(c)(6)]

The Administrator may condition the approval of equivalence on requirements that may be necessary to assure operation and maintenance to achieve the same emission reduction as the required work practice.

iv. [60.484(d)]
The permittee may offer a unique approach to demonstrate the equivalence of any equivalent means of emission limitation.

v. (a) [60.484(e)(1)]
After a request for determination of equivalence is received, the Administrator will publish a notice in the FEDERAL REGISTER and provide the opportunity for public hearing if the Administrator judges that the request may be approved.

(b) [60.484(e)(2)]
After notice and opportunity for public hearing, the Administrator will determine the equivalence of a means of emission limitation and will publish the determination in the FEDERAL REGISTER.

(c) [60.484(e)(3)]
Any equivalent means of emission limitations approved under this section shall constitute a required work practice, equipment, design, or operational standard within the meaning of section 111(h)(1) of the Clean Air Act.

vi. (a) [60.484(f)(1)]
Manufacturers of equipment used to control equipment leaks of VOC may apply to the Administrator for determination of equivalence for any equivalent means of emission limitation that achieves a reduction in emissions of VOC achieved by the equipment, design, and operational requirements of 40 CFR Part 60, Subpart VV.

(b) [60.484(f)(2)]
The Administrator will make an equivalence determination according to the provisions of paragraphs (b), (c), (d), and (e) of 40 CFR 60.484.

3. 40 CFR Part 63, Subpart H - National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks

a. 40 CFR 63.160 Applicability and designation of source.

i. [63.160(a)]
The provisions of 40 CFR Part 63, Subpart H apply to pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, instrumentation systems, and control devices or closed vent systems required

by 40 CFR Part 63, Subpart H that are intended to operate in organic hazardous air pollutant service 300 hours or more during the calendar year within a source subject to the provisions of a specific subpart in 40 CFR Part 63 that references 40 CFR Part 63, Subpart H.

ii. [63.160(b)]
After the compliance date for a process unit, equipment to which 40 CFR Part 63, Subpart H applies that are also subject to the provisions of:

(a) [63.160(b)(1)
40 CFR Part 60 will be required to comply only with the provisions of 40 CFR Part 63, Subpart H.

(b) [63.160(b)(2)]
40 CFR Part 61 will be required to comply only with the provisions of 40 CFR Part 63, Subpart H.

iii. [63.160(c)]
If a process unit subject to the provisions of 40 CFR Part 63, Subpart H has equipment to which 40 CFR Part 63, Subpart H does not apply, but which is subject to a standard identified in paragraph (c)(1), (c)(2), or (c)(3) of 40 CFR 63.160, the permittee may elect to apply 40 CFR Part 63, Subpart H to all such equipment in the process unit. If the permittee elects this method of compliance, all VOC in such equipment shall be considered, for purposes of applicability and compliance with 40 CFR Part 63, Subpart H, as if it were organic hazardous air pollutant (HAP). Compliance with the provisions of 40 CFR Part 63, Subpart H, in the manner described in this paragraph, shall be deemed to constitute compliance with the standard identified in paragraph (c)(1), (c)(2), or (c)(3) of 40 CFR 63.160.

(a) [63.160(c)(1)]
40 CFR Part 60, Subpart VV, GGG, or KKK; (2) of 40 CFR Part 61, Subpart F or J; or (3) of 40 CFR Part 264, Subpart BB or 40 CFR Part 265, Subpart BB.

iv. [63.160(d)]
The provisions in 40 CFR 63.1(a)(3) of Subpart A of 40 CFR Part 63 do not alter the provisions in paragraph (b) of 40 CFR 63.160.

v. [63.160(e)]
Except as provided in any subpart that references 40 CFR Part 63, Subpart H, lines and equipment not containing process fluids are not subject to the provisions of 40 CFR Part 63, Subpart H. Utilities, and other non-process lines, such as heating and cooling systems which do not combine their materials with those in the processes they serve, are not considered to be part of a process unit.

vi. [63.160(f)]
The provisions of 40 CFR Part 63, Subpart H do not apply to research and development facilities or to bench-scale batch processes, regardless of whether the facilities or processes are located at the same plant site as a process subject to the provisions of 40 CFR Part 63, Subpart H.

vii. [63.160(g)]
Alternative means of compliance.

(a) [63.160(g)(1)]
Option to comply with part 65. Permittees of chemical manufacturing process units (CMPU) that are subject to 40 CFR 63.100 may choose to comply with the provisions of 40 CFR Part 65 for all Group 1 and Group 2 process vents, Group 1 storage vessels, Group 1 transfer operations, and equipment that are subject to 40 CFR 63.100, that are part of the CMPU. Other provisions applying to a permittee who chooses to comply with 40 CFR Part 65 are provided in 40 CFR 65.1.

(i) [63.160(g)(1)(i)]
For equipment, 40 CFR Part 65 satisfies the requirements of 40 CFR 63.102, 63.103, and 63.162 through 63.182. When choosing to comply with 40 CFR Part 65, the requirements of 40 CFR 63.180(d) [See section A.V] continue to apply.

(ii) [63.160(g)(1)(ii)]
For Group 1 and Group 2 process vents, Group 1 storage vessels, and Group 1 transfer operations, comply with 40 CFR 63.110(i)(1).

(b) [63.160(g)(2)]
Part 65, Subpart C or F. For permittees choosing to comply with 40 CFR Part 65, each surge control vessel and bottoms receiver subject to 40 CFR 63.100 that meets the conditions specified in table 2 or table 3 of 40 CFR Part 63, Subpart H [See section A.VI.] shall meet the requirements for storage vessels in 40 CFR Part 65, Subpart C; all other equipment subject to 40 CFR 63.100 shall meet the requirements in 40 CFR Part 65, Subpart F.

(c) [63.160(g)(3)]
Part 63, Subpart A. Permittees who choose to comply with 40 CFR Part 65, Subpart C or F, for equipment subject to 40 CFR 63.100 must also comply with the applicable general provisions of 40 CFR Part 63 listed in table 4 of 40 CFR Part 63, Subpart H [See section A.VI]. All sections and paragraphs of Subpart A of 40 CFR Part 63 that are not mentioned in table 4 of 40 CFR Part 63, Subpart H [See section A.VI] do not apply to permittees of equipment subject to 40 CFR 63.100 of Subpart F complying with 40 CFR Part 65, Subpart C or F, except that

provisions required to be met prior to implementing 40 CFR Part 65 still apply. Permittees who choose to comply with 40 CFR Part 65, Subpart C or F, must comply with 40 CFR Part 65, Subpart A.

b. 40 CFR 63.162 Standards: General.

[63.162(a)]
Compliance with 40 CFR Part 63, Subpart H will be determined by review of the records required by 40 CFR 63.181 and the reports required by 40 CFR 63.182, review of performance test results, and by inspections.

i. (a) [63.162(b)(1)]
A permittee may request a determination of alternative means of emission limitation to the requirements of 40 CFR 63.163 through 63.170, and 40 CFR 63.172 through 63.174 as provided in 40 CFR 63.177 [See section A.II].

(b) [63.162(b)(2)]
If the Administrator makes a determination that a means of emission limitation is a permissible alternative to the requirements of 40 CFR 63.163 through 63.170, and 40 CFR 63.172 through 63.174 [See section A.II], the permittee shall comply with the alternative.

ii. [63.162(c)]
Each piece of equipment in a process unit to which 40 CFR Part 63, Subpart H applies shall be identified such that it can be distinguished readily from equipment that is not subject to 40 CFR Part 63, Subpart H. Identification of the equipment does not require physical tagging of the equipment. For example, the equipment may be identified on a plant site plan, in log entries, or by designation of process unit boundaries by some form of weatherproof identification.

iii. [63.162(d)]
Equipment that is in vacuum service is excluded from the requirements of 40 CFR Part 63, Subpart H.

iv. [63.162(e)]
Equipment that is in organic HAP service less than 300 hours per calendar year is excluded from the requirements of 40 CFR 63.163 through 63.174 and 40 CFR 63.178 [See section A.II] if it is identified as required in 40 CFR 63.181(j) [See section A.III].

v. [63.162(g)]
Except as provided in paragraph (g)(1) of 40 CFR 63.162, all terms in 40 CFR Part 63, Subpart H that define a period of time for completion of required tasks (e.g., weekly, monthly, quarterly, annual), refer to the standard calendar

periods unless specified otherwise in the section or subsection that imposes the requirement.

(a) [63.162(g)(1)]
If the initial compliance date does not coincide with the beginning of the standard calendar period, a permittee may elect to utilize a period beginning on the compliance date, or may elect to comply in accordance with the provisions of paragraphs (g)(2) or (g)(3) of 40 CFR 63.162.

(b) [63.162(g)(2)]
Time periods specified in 40 CFR Part 63, Subpart H for completion of required tasks may be changed by mutual agreement between the permittee and the Administrator, as specified in Subpart A of 40 CFR Part 63. For each time period that is changed by agreement, the revised period shall remain in effect until it is changed. A new request is not necessary for each recurring period.

(c) [63.162(g)(3)]
Except as provided in paragraph (g)(1) or (g)(2) of 40 CFR 63.162, where the period specified for compliance is a standard calendar period, if the initial compliance date does not coincide with the beginning of the calendar period, compliance shall be required according to the schedule specified in paragraphs (g)(3)(i) or (g)(3)(ii) of 40 CFR 63.162, as appropriate.

(i) [63.162(g)(3)(i)]
Compliance shall be required before the end of the standard calendar period within which the compliance deadline occurs, if there remain at least 3 days for tasks that must be performed weekly, at least 2 weeks for tasks that must be performed monthly, at least 1 month for tasks that must be performed each quarter, or at least 3 months for tasks that must be performed annually; or

(ii) [63.162(g)(3)(ii)]
In all other cases, compliance shall be required before the end of the first full standard calendar period after the period within which the initial compliance deadline occurs.

(d) [63.162(g)(4)]
In all instances where a provision of 40 CFR Part 63, Subpart H requires completion of a task during each of multiple successive periods, a permittee may perform the required task at any time during each period, provided the task is conducted at a reasonable interval after completion of the task during the previous period.

vi. [CFR 63.162(h)]
In all cases where the provisions of 40 CFR Part 63, Subpart H require a permittee to repair leaks by a specified time after the leak is detected, it is a violation of 40 CFR Part 63, Subpart H to fail to take action to repair the leaks within the specified time. If action is taken to repair the leaks within the specified time, failure of that action to successfully repair the leak is not a violation of 40 CFR Part 63, Subpart H. However, if the repairs are unsuccessful, a leak is detected and the permittee shall take further action as required by applicable provisions of 40 CFR Part 63, Subpart H.

c. 40 CFR 63.163 Standards: Pumps in light liquid service.

i. [63.163(a)]
The provisions of 40 CFR 63.163 apply to each pump that is in light liquid service.

(a) [63.163(a)(1)]
The provisions are to be implemented on the dates specified in the specific subpart in 40 CFR Part 63 that references 40 CFR Part 63, Subpart H in the phases specified below:

(i) [63.163(a)(1)(i)]
For each group of existing process units at existing sources subject to the provisions of subparts F or I of 40 CFR Part 63, the phases of the standard are:

(aa) [63.163(a)(1)(i)(A)]
Phase I, beginning on the compliance date;

(bb) [63.163(a)(1)(i)(B)]
Phase II, beginning no later than 1 year after the compliance date; and

(cc) [63.163(a)(1)(i)(C)]
Phase III, beginning no later than 2 ½years after the compliance date.

(ii) [63.163(a)(1)(ii)]
For new sources subject to the provisions of subparts F or I of 40 CFR Part 63, the applicable phases of the standard are:

(aa) [63.163(a)(1)(ii)(A)]
After initial start-up, comply with the Phase II requirements; and

(bb) [63.163(a)(1)(ii)(B)]

Beginning no later than 1 year after initial start-up, comply with the Phase III requirements.

(b) [63.163(a)(2)]
The permittee of a source subject to the provisions of subparts For I of 40 CFR Part 63 may elect to meet the requirements of a later phase during the time period specified for an earlier phase.

(c) [63.163(a)(3)]
Sources subject to other subparts in 40 CFR Part 63 that reference 40 CFR Part 63, Subpart H shall comply on the dates specified in the applicable subpart.

ii. (a) [63.163(b)(1)]
The permittee of a process unit subject to 40 CFR Part 63, Subpart H shall monitor each pump monthly to detect leaks by the method specified in 40 CFR 63.180(b) and shall comply with the requirements of paragraphs (a) through (d) of 40 CFR 63.163, except as provided in 40 CFR 63.162(b) and paragraphs (e) through (j) of 40 CFR 63.163.

(b) [63.163(b)(2)]
The instrument reading, as determined by the method as specified in 40 CFR 63.180(b), that defines a leak in each phase of the standard is:

(i) [63.163(b)(2)(i)]
For Phase I, an instrument reading of 10,000 parts per million or greater.

(ii) [63.163(b)(2)(ii)]
For Phase II, an instrument reading of 5,000 parts per million or greater.

(iii) [63.163(b)(2)(iii)]
For Phase III, an instrument reading of:

(aa) [63.163(b)(2)(iii)(A)]
5,000 parts per million or greater for pumps handling polymerizing monomers;

(bb) [63.163(b)(2)(iii)(B)]
2,000 parts per million or greater for pumps in food/medical service; and

(cc) [63.163(b)(2)(iii)(C)]
1,000 parts per million or greater for all other pumps.

(c) [63.163(b)(3)]

Each pump shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, a leak is detected.

iii. (a) [63.163(c)(1)]
When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in paragraph (c)(3) of 40 CFR 63.163 or 40 CFR 63.171 [See section A.II].

(b) [63.163(c)(2)]
A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. First attempts at repair include, but are not limited to, the following practices where practicable:

(c) (i) [63.163(c)(2)(i)]
Tightening of packing gland nuts.

(ii) [63.163(c)(2)(ii)]
Ensuring that the seal flush is operating at design pressure and temperature.

(iii) [63.163(c)(3)]
For pumps in Phase III to which a 1,000 parts per million leak definition applies, repair is not required unless an instrument reading of 2,000 parts per million or greater is detected.

iv. (a) [63.163(d)]
The permittee shall decide no later than the first monitoring period whether to calculate percent leaking pumps on a process unit basis or on a source-wide basis. Once the permittee has decided, all subsequent percent calculations shall be made on the same basis.

(b) [63.163(d)(2)]
If, in Phase III, calculated on a 6-month rolling average, the greater of either 10 percent of the pumps in a process unit or three pumps in a process unit leak, the permittee shall implement a quality improvement program for pumps that complies with the requirements of 40 CFR 63.176 [See section A.II].

(c) [63.163(d)(3)]
The number of pumps at a process unit shall be the sum of all the pumps in organic HAP service, except that pumps found leaking in a continuous process unit within 1 month after start-up of the pump shall not count in the percent leaking pumps calculation for that one monitoring period only.

(d) [63.163(d)(4)]
Percent leaking pumps shall be determined by the following equation:

%PL = ((PL-PS)/(PT-PS))×100

where:

%PL = Percent leaking pumps;
PL = Number of pumps found leaking as determined through monthly monitoring as required in paragraphs (b)(1) and (b)(2) of 40 CFR 63.163;
PT = Total pumps in organic HAP service, including those meeting the criteria in paragraphs (e) and (f) of 40 CFR 63.163; and
PS = Number of pumps leaking within 1 month of start-up during the current monitoring period.

v. [63.163(e)]
Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraphs (a) through (d) of 40 CFR 63.163, provided the following requirements are met:

(a) [63.163(e)(1)]
Each dual mechanical seal system is:

(i) [63.163(e)(1)(i)]
Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or

(ii) [63.163(e)(1)(ii)]
Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 63.172; or

(iii) [63.163(e)(1)(iii)]
Equipped with a closed-loop system that purges the barrier fluid into a process stream.

(b) [63.163(e)(2)]
The barrier fluid is not in light liquid service.

(c) [63.163(e)(3)]
Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.

(d) [63.163(e)(4)]

Each pump is checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

(i) [63.163(e)(4)(i)]
If there are indications of liquids dripping from the pump seal at the time of the weekly inspection, the pump shall be monitored as specified in 40 CFR 63.180(b) [See section A.V] to determine if there is a leak of organic HAP in the barrier fluid.

(ii) [63.163(e)(4)(ii)]
If an instrument reading of 1,000 parts per million or greater is measured, a leak is detected.

(e) [63.163(e)(5)]
Each sensor as described in paragraph (e)(3) of 40 CFR 63.163 is observed daily or is equipped with an alarm unless the pump is located within the boundary of an unmanned plant site.

(f) (i) [63.163(e)(6)]
The permittee determines, based on design considerations and operating experience, criteria applicable to the presence and frequency of drips and to the sensor that indicates failure of the seal system, the barrier fluid system, or both.

(ii) [63.163(e)(6)(ii)]
If indications of liquids dripping from the pump seal exceed the criteria established in paragraph (e)(6)(i) of 40 CFR 63.163, or if, based on the criteria established in paragraph (e)(6)(i) of 40 CFR 63.163, the sensor indicates failure of the seal system, the barrier fluid system, or both, a leak is detected.

(iii) [63.163(e)(6)(iii)]
When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 63.171.

(iv) [63.163(e)(6)(iv)]
A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

vi. [63.163(f)]
Any pump that is designed with no externally actuated shaft penetrating the pump housing is exempt from the requirements of paragraphs (a) through (c) of 40 CFR 63.163.

vii. [63.163(g)]

Any pump equipped with a closed-vent system capable of capturing and transporting any leakage from the seal or seals to a process or to a fuel gas system or to a control device that complies with the requirements of 40 CFR 63.172 [See section A.II] is exempt from the requirements of paragraphs (b) through (e) of 40 CFR 63.163.

viii. [63.163(h)]
Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of paragraphs (b)(3) and (e)(4) of 40 CFR 63.163, and the daily requirements of paragraph (e)(5) of 40 CFR 63.163, provided that each pump is visually inspected as often as practicable and at least monthly.

ix. [63.163(i)]
If more than 90 percent of the pumps at a process unit meet the criteria in either paragraph (e) or (f) of 40 CFR 63.163, the process unit is exempt from the requirements of paragraph (d) of 40 CFR 63.163.

x. [63.163(j)]
Any pump that is designated, as described in 40 CFR 63.181(b)(7)(i), as an unsafe-to-monitor pump is exempt from the requirements of paragraphs (b) through (e) of 40 CFR 63.163 if:

(a) [63.163(j)(1)]
The permittee of the pump determines that the pump is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraphs (b) through (d) of 40 CFR 63.163; and

(b) [63.163(j)(2)]
The permittee of the pump has a written plan that requires monitoring of the pump as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable.

d. 40 CFR 63.164 Standards: Compressors.

i. [63.164(a)]
Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of process fluid to the atmosphere, except as provided in 40 CFR 63.162(b) and paragraphs (h) and (i) of 40 CFR 63.164.

ii. [63.164(b)]
Each compressor seal system as required in paragraph (a) of 40 CFR 63.164shall be:

(a) [63.164(b)(1)]
Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or

(b) [63.164(b)(2)]
Equipped with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 63.172; or

(c) [63.164(b)(3)]
Equipped with a closed-loop system that purges the barrier fluid directly into a process stream.

iii. [63.164(c)]
The barrier fluid shall not be in light liquid service.

iv. [63.164(d)]
Each barrier fluid system as described in paragraphs (a) through (c) of 40 CFR 63.164 shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.

v. (a) [63.164(e)]
Each sensor as required in paragraph (d) of 40 CFR 63.164 shall be observed daily or shall be equipped with an alarm unless the compressor is located within the boundary of an unmanned plant site.

(b) [63.164(e)(2)]
The permittee shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

vi. [63.164(f)]
If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined under paragraph (e)(2) of 40 CFR 63.164, a leak is detected.

vii. (a) [63.164(g)]
When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 63.171.

(b) [63.164(g)(2)]
A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

viii. 40 CFR 63.164(h)

A compressor is exempt from the requirements of paragraphs (a) through (g) of 40 CFR 63.164 if it is equipped with a closed-vent system to capture and transport leakage from the compressor drive shaft seal back to a process or a fuel gas system or to a control device that complies with the requirements of 40 CFR 63.172.

ix. [63.164(i)]
Any compressor that is designated, as described in 40 CFR 63.181(b)(2)(ii) [See section A.III], to operate with an instrument reading of less than 500 parts per million above background, is exempt from the requirements of paragraphs (a) through (h) of 40 CFR 63.164 if the compressor:

(a) [63.164(i)(1)]
Is demonstrated to be operating with an instrument reading of less than 500 parts per million above background, as measured by the method specified in 40 CFR 63.180(c) [See section A.V]; and

(b) [63.164(i)(2)]
Is tested for compliance with paragraph (i)(1) of 40 CFR 63.164 initially upon designation, annually, and at other times requested by the Administrator.

e. 40 CFR 63.165 Standards: Pressure relief devices in gas/vapor service.

i. [63.165(a)]
Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with an instrument reading of less than 500 parts per million above background except as provided in paragraph (b) of 40 CFR 63.165, as measured by the method specified in 40 CFR 63.180(c).

ii. (a) [63.165(b)]
After each pressure release, the pressure relief device shall be returned to a condition indicated by an instrument reading of less than 500 parts per million above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 63.171 [See section A.II].

(b) [63.165(b)(2)]
No later than 5 calendar days after the pressure release and being returned to organic HAP service, the pressure relief device shall be monitored to confirm the condition indicated by an instrument reading of less than 500 parts per million above background, as measured by the method specified in 40 CFR 63.180(c) [See section A.V].

iii. [63.165(c)]
Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed-vent system capable of capturing and transporting

leakage from the pressure relief device to a control device as described in 40 CFR 63.172 is exempt from the requirements of paragraphs (a) and (b) of 40 CFR 63.165.

iv. (a) [63.165(d)]
Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of paragraphs (a) and (b) of 40 CFR 63.165, provided the permittee complies with the requirements in paragraph (d)(2) of 40 CFR 63.165.

(b) [63.165(d)(2)]
After each pressure release, a rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 63.171.

f. 40 CFR 63.166 Standards: Sampling connection systems.

i. [63.166(a)]
Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR 63.162(b) See section A.II]. Gases displaced during filling of the sample container are not required to be collected or captured.

ii. [63.166(b)]
Each closed-purge, closed-loop, or closed-vent system as required in paragraph (a) of 40 CFR 63.166 shall:

(a) [63.166(b)(1)]
Return the purged process fluid directly to the process line; or

(b) [63.166(b)(2)]
Collect and recycle the purged process fluid to a process; or

(c) [63.166(b)(3)]
Be designed and operated to capture and transport the purged process fluid to a control device that complies with the requirements of 40 CFR 63.172 [See section A.II]; or

(d) [63.166(b)(4)]
Collect, store, and transport the purged process fluid to a system or facility identified in paragraph (b)(4)(i), (ii), or (iii) of 40 CFR 63.166.

(i) [63.166(b)(4)(i)]
A waste management unit as defined in 40 CFR 63.111 of Subpart G of 40 CFR Part 63, if the waste management unit is subject to, and operated in compliance with the provisions of

Subpart G of 40 CFR Part 63applicable to group 1 wastewater streams. If the purged process fluid does not contain any organic HAP listed in Table 9 of Subpart G of part 63, the waste management unit need not be subject to, and operated in compliance with the requirements of 40 CFR part 63, Subpart G applicable to group 1 wastewater streams provided the facility has an NPDES permit or sends the wastewater to an NPDES permitted facility.

(ii) [63.166(b)(4)(ii)]
A treatment, storage, or disposal facility subject to regulation under 40 CFR part 262, 264, 265, or 266; or

(iii) [63.166(b)(4)(iii)]
A facility permitted, licensed, or registered by a State to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 CFR part 261.

iii. [63.166(c)]
In-situ sampling systems and sampling systems without purges are exempt from the requirements of paragraphs (a) and (b) of 40 CFR 63.166.

g. 40 CFR 63.167 Standards: Open-ended valves or lines.

i. (a) [63.167(a)]
Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 63.162(b) [See section A.II] and paragraphs (d) and (e) of 40 CFR 63.167.

(b) [63.167(a)(2)]
The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line, or during maintenance or repair.

ii. [63.167(b)]
Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.

iii. [63.167(c)]
When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (a) of 40 CFR 63.167 at all other times.

iv. [63.167(d)]

Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of paragraphs (a), (b) and (c) of 40 CFR 63.167.

v. [63.167(e)]
Open-ended valves or lines containing materials which would autocatalytically polymerize or, would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in paragraphs (a) through (c) of 40 CFR 63.167 are exempt from the requirements of paragraph (a) through (c) of 40 CFR 63.167.

h. 40 CFR 63.168 Standards: Valves in gas/vapor service and in light liquid service.

i. (a) [63.168(a)]
The provisions of 40 CFR 63.168 apply to valves that are either in gas service or in light liquid service.

(b) 40 CFR 63.168(a)(1)
The provisions are to be implemented on the dates set forth in the specific subpart in 40 CFR Part 63 that references 40 CFR Part 63, Subpart H as specified in paragraphs (a)(1)(i), (a)(1)(ii), or (a)(1)(iii) of 40 CFR 63.168.

(i) [63.168(a)(1)(i)]
For each group of existing process units at existing sources subject to the provisions of Subpart F or I of 40 CFR Part 63, the phases of the standard are:

(aa) [63.168(a)(1)(i)(A)]
Phase I, beginning on the compliance date;

(bb) [63.168(a)(1)(i)(B)]
Phase II, beginning no later than 1 year after the compliance date; and

(cc) [63.168(a)(1)(i)(C)]
Phase III, beginning no later than 2 ½years after the compliance date.

(ii) [63.168(a)(1)(ii)]
For new sources subject to the provisions of Subpart F or I of 40 CFR Part 63, the applicable phases of the standard are:

(aa) [63.168(a)(1)(ii)(A)]
After initial start-up, comply with the Phase II requirements; and

(bb) [63.168(a)(1)(ii)(B)]
Beginning no later than 1 year after initial start-up, comply with the Phase III requirements.

(iii) [63.168(a)(1)(iii)]
Sources subject to other subparts in 40 CFR Part 63 that reference 40 CFR Part 63, Subpart H shall comply on the dates specified in the applicable subpart.

(c) [63.168(a)(2)]
The permittee of a source subject to 40 CFR Part 63, Subpart H may elect to meet the requirements of a later phase during the time period specified for an earlier phase.

(d) [63.168(a)(3)]
The use of monitoring data generated before April 22, 1994 to qualify for less frequent monitoring is governed by the provisions of 40 CFR 63.180(b)(6) [See section A.V].

ii. [63.168(b)]
The permittee of a source subject to 40 CFR Part 63, Subpart H shall monitor all valves, except as provided in 40 CFR 63.162(b) and paragraphs (h) and (i) of 40 CFR 63.168, at the intervals specified in paragraphs (c) and (d) of 40 CFR 63.168 and shall comply with all other provisions of 40 CFR 63.168, except as provided in 40 CFR 63.171, 63.177, 63.178, and 63.179 [See section A.II].

(a) [63.168(b)(1)]
The valves shall be monitored to detect leaks by the method specified in 40 CFR 63.180(b).

(b) [63.168(b)(2)]
The instrument reading that defines a leak in each phase of the standard is:

(i) [63.168(b)(2)(i)]
For Phase I, an instrument reading of 10,000 parts per million or greater.

(ii) [63.168(b)(2)(ii)]
For Phase II, an instrument reading of 500 parts per million or greater.

(iii) [63.168(b)(2)(iii)]
For Phase III, an instrument reading of 500 parts per million or greater.

iii. [63.168(c)]
In Phases I and II, each valve shall be monitored quarterly.

iv. [63.168(d)]
In Phase III, the permittee shall monitor valves for leaks at the intervals specified below:

(a) [63.168(d)(1)]
At process units with 2 percent or greater leaking valves, calculated according to paragraph (e) of 40 CFR 63.168, the permittee shall either:

(i) [63.168(d)(1)(i)]
Monitor each valve once per month; or

(ii) [63.168(d)(1)(ii)]
Within the first year after the onset of Phase III, implement a quality improvement program for valves that complies with the requirements of 40 CFR 63.175(d) or (e) and monitor quarterly.

(b) [63.168(d)(2)]
At process units with less than 2 percent leaking valves, the permittee shall monitor each valve once each quarter, except as provided in paragraphs (d)(3)and (d)(4) of 40 CFR 63.168.

(c) [63.168(d)(3)]
At process units with less than 1 percent leaking valves, the permittee may elect to monitor each valve once every 2 quarters.

(d) [63.168(d)(4)]
At process units with less than 0.5 percent leaking valves, the permittee may elect to monitor each valve once every 4 quarters.

v. (a) [63.168(e)]
Percent leaking valves at a process unit shall be determined by the following equation:

$$\%VL = (VL/(VT+ VC))\times 100$$

where:

%VL = Percent leaking valves as determined through periodic monitoring required in paragraphs (b) through (d) of 40 CFR 63.168.

VL = Number of valves found leaking excluding nonrepairables as provided in paragraph (e)(3)(i) of 40 CFR 63.168.

VT = Total valves monitored, in a monitoring period excluding valves monitored as required by (f)(3) of 40 CFR 63.168.

VC = Optional credit for removed valves=0.67 × net number (i.e., total removed-total added) of valves in organic HAP service removed from process unit after the date set forth in 40 CFR 63.100(k) of Subpart F for existing process units, and after the date of initial start-up for new sources. If credits are not taken, then VC=0.

(b) [63.168(e)(2)]
For use in determining monitoring frequency, as specified in paragraph (d) of 40 CFR 63.168, the percent leaking valves shall be calculated as a rolling average of two consecutive monitoring periods for monthly, quarterly, or semiannual monitoring programs; and as an average of any three out of four consecutive monitoring periods for annual monitoring programs.

(c) (i) [63.168(e)(3)]
Nonrepairable valves shall be included in the calculation of percent leaking valves the first time the valve is identified as leaking and nonrepairable and as required to comply with paragraph (e)(3)(ii) of 40 CFR 63.168. Otherwise, a number of nonrepairable valves (identified and included in the percent leaking calculation in a previous period) up to a maximum of 1 percent of the total number of valves in organic HAP service at a process unit may be excluded from calculation of percent leaking valves for subsequent monitoring periods.

(ii) [63.168(e)(3)(ii)]
If the number of nonrepairable valves exceeds 1 percent of the total number of valves in organic HAP service at a process unit, the number of nonrepairable valves exceeding 1 percent of the total number of valves in organic HAP service shall be included in the calculation of percent leaking valves.

vi. (a) [63.168(f)]
When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.171.

(b) [63.168(f)(2)]
A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(c) [63.168(f)(3)]
When a leak has been repaired, the valve shall be monitored at least once within the first 3 months after its repair.

(i) [63.168(f)(3)(i)]
The monitoring shall be conducted as specified in 40 CFR 63.180(b) and (c), as appropriate, to determine whether the valve has resumed leaking.

(ii) [63.168(f)(3)(ii)]
Periodic monitoring required by paragraphs (b) through (d) of 40 CFR 63.168 may be used to satisfy the requirements of this paragraph (f)(3), if the timing of the monitoring period coincides with the time specified in this paragraph (f)(3). Alternatively, other monitoring may be performed to satisfy the requirements of this paragraph (f)(3), regardless of whether the timing of the monitoring period for periodic monitoring coincides with the time specified in this paragraph (f)(3).

(iii) [63.168(f)(3)(iii)]
If a leak is detected by monitoring that is conducted pursuant to paragraph (f)(3) of 40 CFR 63.168, the permittee shall follow the provisions of paragraphs (f)(3)(iii)(A) and (f)(3)(iii)(B) of 40 CFR 63.168, to determine whether that valve must be counted as a leaking valve for purposes of 40 CFR 63.168(e).

(aa) [63.168(f)(3)(iii)(A)]
If the permittee elected to use periodic monitoring required by paragraphs (b) through (d) of 40 CFR 63.168 to satisfy the requirements of paragraph (f)(3) of 40 CFR 63.168, then the valve shall be counted as a leaking valve.

(bb) [63.168(f)(3)(iii)(B)]
If the permittee elected to use other monitoring, prior to the periodic monitoring required by paragraphs (b) through (d) of 40 CFR 63.168, to satisfy the requirements of paragraph (f)(3) of 40 CFR 63.168, then the valve shall be counted as a leaking valve unless it is repaired and shown by periodic monitoring not to be leaking.

vii. [63.168(g)]
First attempts at repair include, but are not limited to, the following practices where practicable:

(a) [63.168(g)(1)]
Tightening of bonnet bolts,

(b) [63.168(g)(2)]
Replacement of bonnet bolts,

(c) [63.168(g)(3)]
Tightening of packing gland nuts, and

(d) [63.168(g)(4)]
Injection of lubricant into lubricated packing.

viii. [63.168(h)]
Any valve that is designated, as described in 40 CFR 63.181(b)(7)(i) [See section A.III], as an unsafe-to-monitor valve is exempt from the requirements of paragraphs (b) through (f) of 40 CFR 63.168 if:

(a) [63.168(h)(1)]
The permittee of the valve determines that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraphs (b) through (d) of 40 CFR 63.168; and

(b) [63.168(h)(2)]
The permittee of the valve has a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable.

ix. [63.168(i)]
Any valve that is designated, as described in 40 CFR 63.181(b)(7)(ii), as a difficult-to-monitor valve is exempt from the requirements of paragraphs (b) through (d) of 40 CFR 63.168 if:

(a) [63.168(i)(1)]
The permittee of the valve determines that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface or it is not accessible at anytime in a safe manner;

(b) [63.168(i)(2)]
The process unit within which the valve is located is an existing source or the permittee designates less than 3 percent of the total number of valves in a new source as difficult-to-monitor; and

(c) [63.168(i)(3)]
The permittee of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

x. [63.168(j)]
Any equipment located at a plant site with fewer than 250 valves in organic HAP service is exempt from the requirements for monthly monitoring and a quality improvement program specified in paragraph (d)(1) of 40 CFR 63.168.

Instead, the permittee shall monitor each valve in organic HAP service for leaks once each quarter, or comply with paragraphs (d)(3) or (d)(4) of 40 CFR 63.168 except as provided in paragraphs (h) and (i) of 40 CFR 63.168.

i. 40 CFR 63.169 Standards: Pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service.

i. [63.169(a)]
Pumps, valves, connectors, and agitators in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and instrumentation systems shall be monitored within 5 calendar days by the method specified in 40 CFR 63.180(b) [See section A.V] if evidence of a potential leak to the atmosphere is found by visual, audible, olfactory, or any other detection method. If such a potential leak is repaired as required in paragraphs (c) and (d) of 40 CFR 63.169, it is not necessary to monitor the system for leaks by the method specified in 40 CFR 63.180(b).

ii. [63.169(b)]
If an instrument reading of 10,000 parts per million or greater for agitators, 5,000 parts per million or greater for pumps handling polymerizing monomers, 2,000 parts per million or greater for all other pumps (including pumps in food/medical service), or 500 parts per million or greater for valves, connectors, instrumentation systems, and pressure relief devices is measured, a leak is detected.

iii. (a) [63.169(c)]
When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 63.171.

(b) [63.169(c)(2)]
The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(c) [63.169(c)(3)]
For equipment identified in paragraph (a) of 40 CFR 63.169 that is not monitored by the method specified in 40 CFR 63.180(b) [See section A.V], repaired shall mean that the visual, audible, olfactory, or other indications of a leak to the atmosphere have been eliminated; that no bubbles are observed at potential leak sites during a leak check using soap solution; or that the system will hold a test pressure.

(d) [63.169(d)]
First attempts at repair include, but are not limited to, the practices described under 40 CFR 63.163(c)(2) and 63.168(g) [See section A.II], for pumps and valves, respectively.

j. 40 CFR 63.170 Standards: Surge control vessels and bottoms receivers.

Each surge control vessel or bottoms receiver that is not routed back to the process and that meets the conditions specified in table 2 or table 3 of 40 CFR Part 63, Subpart H [See section A.VI] shall be equipped with a closed-vent system that routes the organic vapors vented from the surge control vessel or bottoms receiver back to the process or to a control device that complies with the requirements in 40 CFR 63.172 [See section A.II], except as provided in 40 CFR 63.162(b) , or comply with the requirements of 40 CFR 63.119(b) or (c) of Subpart G of 40 CFR Part 63.

k. 40 CFR 63.171 Standards: Delay of repair.

i. [63.171(a)]
Delay of repair of equipment for which leaks have been detected is allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur by the end of the next process unit shutdown.

ii. [63.171(b)]
Delay of repair of equipment for which leaks have been detected is allowed for equipment that is isolated from the process and that does not remain in organic HAP service.

iii. [63.171(c)]
Delay of repair for valves, connectors, and agitators is also allowed if:

(a) [63.171(c)(1)]
The permittee determines that emissions of purged material resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair, and

(b) [63.171(c)(2)]
When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR 63.172 [See section A.II].

iv. [63.171(d)]
Delay of repair for pumps is also allowed if:

(a) [63.171(d)(1)]
Repair requires replacing the existing seal design with a new system that the permittee has determined under the provisions of 40 CFR 63.176(d) [See section A.II] will provide better performance or:

(i) [63.171(d)(1)(i)]
A dual mechanical seal system that meets the requirements of 40 CFR 63.163(e) [See section A.II],

(ii) [63.171(d)(1)(ii)]
A pump that meets the requirements of 40 CFR 63.163(f) [See section A.II], or

(iii) [63.171(d)(1)(iii)]
A closed-vent system and control device that meets the requirements of 40 CFR 63.163(g) [See section A.II]; and

(b) [63.171(d)(2)]
Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

v. [63.171(e)]
Delay of repair beyond a process unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the second process unit shutdown will not be allowed unless the third process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

l. 40 CFR 63.172 Standards: Closed-vent systems and control devices.

i. [63.172(a)]
Permittees of closed-vent systems and control devices used to comply with provisions of 40 CFR Part 63, Subpart H shall comply with the provisions of 40 CFR 63.172, except as provided in 40 CFR 63.162(b) [See section A.II].

ii. [63.172(b)]
Recovery or recapture devices (e.g., condensers and absorbers) shall be designed and operated to recover the organic hazardous air pollutant emissions or volatile organic compounds emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts par million by volume, whichever is less stringent. The 20 parts per million by volume performance standard is not applicable to the provisions of 40 CFR 63.179 [See section A.II].

iii. [63.172(c)]
Enclosed combustion devices shall be designed and operated to reduce the organic hazardous air pollutant emissions or volatile organic compounds emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent, or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760°C.

iv. [63.172(d)]

Flares used to comply with 40 CFR Part 63, Subpart H shall comply with the requirements of 40 CFR 63.11(b) of Subpart A of 40 CFR Part 63 [See section A.II].

v. [63.172(e)]
Permittees of control devices that are used to comply with the provisions of 40 CFR Part 63, Subpart H shall monitor these control devices to ensure that they are operated and maintained in conformance with their design.
Note: The intent of this provision is to ensure proper operation and maintenance of the control device.

vi. [63.172(f)]
Except as provided in paragraphs (k) and (l) of 40 CFR 63.172, each closed-vent system shall be inspected according to the procedures and schedule specified in paragraphs (f)(1) and (f)(2) of 40 CFR 63.172.

(a) [63.172(f)(1)]
If the closed-vent system is constructed of hard-piping, the permittee shall:

(i) [63.172(f)(1)(i)]
Conduct an initial inspection according to the procedures in paragraph (g) of 40 CFR 63.172, and

(ii) [63.172(f)(1)(ii)]
Conduct annual visual inspections for visible, audible, or olfactory indications of leaks.

(b) [63.172(f)(2)]
If the vapor collection system or closed-vent system is constructed of duct work, the permittee shall:

(i) [63.172(f)(2)(i)]
Conduct an initial inspection according to the procedures in paragraph (g) of 40 CFR 63.172, and

(ii) [63.172(f)(2)(ii)]
Conduct annual inspections according to the procedures in paragraph (g) of 40 CFR 63.172.

vii. [63.172(g)]
Each closed-vent system shall be inspected according to the procedures in 40 CFR 63.180(b).

viii. [63.172(h)]

Leaks, as indicated by an instrument reading greater than 500 parts per million above background or by visual inspections, shall be repaired as soon as practicable, except as provided in paragraph (i) of 40 CFR 63.172.

(a) [63.172(h)(1)]
A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

(b) [63.172(h)(2)]
Repair shall be completed no later than 15 calendar days after the leak is detected, except as provided in paragraph (i) of 40 CFR 63.172.

ix. [63.172(i)]
Delay of repair of a closed-vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the permittee determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown.

x. [63.172(j)]
For each closed-vent system that contains bypass lines that could divert a vent stream away from the control device and to the atmosphere, the permittee shall comply with the provisions of either paragraph (j)(1) or (j)(2) of 40 CFR 63.172, except as provided in paragraph (j)(3) of 40 CFR 63.172.

(a) 63.172(j)(1)
Install, set or adjust, maintain, and operate a flow indicator that takes a reading at least once every 15 minutes. Records shall be generated as specified in 40 CFR 63.118(a)(3) of Subpart G of 40 CFR Part 63. The flow indicator shall be installed at the entrance to any bypass line; or

(b) [63.172(j)(2)]
Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass line.

(c) 63.172(j)(3)
Equipment such as low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and pressure relief valves needed for safety purposes are not subject to this paragraph.

xi. [63.172(k)]
Any parts of the closed-vent system that are designated, as described in paragraph 63.181(b)(7)(i) [See section A.III], as unsafe to inspect are exempt

from the inspection requirements of paragraphs (f)(1) and (f)(2) of 40 CFR 63.172 if:

(a) [63.172(k)(1)]
The permittee determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with paragraphs (f)(1) or (f)(2) of 40 CFR 63.172; and

(b) [63.172(k)(2)]
The permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times, but not more frequently than annually.

xii. [63.172(l)]
Any parts of the closed-vent system that are designated, as described in 40 CFR 63.181(b)(7)(i), as difficult to inspect are exempt from the inspection requirements of paragraphs (f)(1) and (f)(2) of 40 CFR 63.172 if:

(a) [63.172(l)(1)]
The permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and

(b) [63.172(l)(2)]
The permittee has a written plan that requires inspection of the equipment at least once every 5 years.

xiii. [63.172(m)]
Whenever organic HAP emissions are vented to a closed-vent system or control device used to comply with the provisions of 40 CFR Part 63, Subpart H, such system or control device shall be operating.

xiv. [63.172(n)]
After the compliance dates specified in 40 CFR 63.100 of Subpart F of 40 CFR Part 63, the permittee of any control device subject to 40 CFR Part 63, Subpart H that is also subject to monitoring, record keeping, and reporting requirements in 40 CFR Part 264, Subpart BB, or is subject to monitoring and record keeping requirements in 40 CFR Part 265, Subpart BB, may elect to comply either with the monitoring, record keeping, and reporting requirements of 40 CFR Part 63, Subpart H, or with the monitoring, record keeping, and reporting requirements in 40 CFR parts 264 and/or 265, as described in this paragraph, which shall constitute compliance with the monitoring, record keeping and reporting requirements of 40 CFR Part 63, Subpart H. The permittee shall identify which option has been chosen, in the next periodic report required by 40 CFR 63.182(d) [See section A.IV].

m. 40 CFR 63.173 Standards: Agitators in gas/vapor service and in light liquid service.

i. (a) [63.173(a)(1)]
Each agitator shall be monitored monthly to detect leaks by the methods specified in 40 CFR 63.180(b), except as provided in 40 CFR 63.162(b) [See section A.II].

(b) [63.173(a)(2)]
If an instrument reading of 10,000 parts per million or greater is measured, a leak is detected.

ii. (a) [63.173(b)(1)]
Each agitator shall be checked by visual inspection each calendar week for indications of liquids dripping from the agitator.

(b) 63.173(b)(2)
If there are indications of liquids dripping from the agitator, a leak is detected.

iii. (a) [63.173(c)(1)]
When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 63.171.

(b) [63.173(c)(2)]
A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

iv. [63.173(d)]
Each agitator equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraph (a) of 40 CFR 63.173, provided the requirements specified in paragraphs (d)(1) through (d)(6) of 40 CFR 63.173 are met:

(a) [63.173(d)(1)]
Each dual mechanical seal system is:

(i) [63.173(d)(1)(i)]
Operated with the barrier fluid at a pressure that is at all times greater than the agitator stuffing box pressure; or

(ii) [63.173(d)(1)(ii)]
Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 63.172 [See section A.II]; or

(iii) [63.173(d)(1)(iii)]
Equipped with a closed-loop system that purges the barrier fluid into a process stream.

(b) [63.173(d)(2)]
The barrier fluid is not in light liquid organic HAP service.

(c) [63.173(d)(3)]
Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.

(d) [63.173(d)(4)]
Each agitator is checked by visual inspection each calendar week for indications of liquids dripping from the agitator seal.

(i) [63.173(d)(4)(i)]
If there are indications of liquids dripping from the agitator seal at the time of the weekly inspection, the agitator shall be monitored as specified in 40 CFR 63.180(b) to determine the presence of organic HAP in the barrier fluid.

(ii) [63.173(d)(4)(ii)]
If an instrument reading of 10,000 parts per million or greater is measured, a leak is detected.

(e) [63.173(d)(5)]
Each sensor as described in paragraph (d)(3) of 40 CFR 63.173 is observed daily or is equipped with an alarm unless the agitator is located within the boundary of an unmanned plant site.

(f) (i) [63.173(d)(6)(i)]
The permittee determines, based on design considerations and operating experience, criteria applicable to the presence and frequency of drips and to the sensor that indicates failure of the seal system, the barrier fluid system, or both.

(ii) [63.173(d)(6)(ii)]
If indications of liquids dripping from the agitator seal exceed the criteria established in paragraph (d)(6)(i) of 40 CFR 63.173, or if, based on the criteria established in paragraph (d)(6)(i) of 40 CFR 63.173, the sensor indicates failure of the seal system, the barrier fluid system, or both, a leak is detected.

(iii) [63.173(d)(6)(iii)]
When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 63.171.

(iv) [63.173(d)(6)(iv)]
A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

v. [63.173(e)]
Any agitator that is designed with no externally actuated shaft penetrating the agitator housing is exempt from paragraphs (a) through (c) of 40 CFR 63.173.

vi. [63.173(f)]
Any agitator equipped with a closed-vent system capable of capturing and transporting any leakage from the seal or seals to a process or fuel gas system or to a control device that complies with the requirements of 40 CFR 63.172 [See section A.II] is exempt from the requirements of paragraphs (a) through (c) of the section.

vii. [63.173(g)]
Any agitator that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of paragraphs (b)(1) and (d)(4) of 40 CFR 63.173, and the daily requirements of paragraph (d)(5) of 40 CFR 63.173, provided that each agitator is visually inspected as often as practical and at least monthly.

viii. [63.173(h)]
Any agitator that is difficult-to-monitor is exempt from the requirements of paragraphs (a) through (d) of 40 CFR 63.173 if:

(a) 63.173(h)(1)
The permittee determines that the agitator cannot be monitored without elevating the monitoring personnel more than two meters above a support surface or it is not accessible at anytime in a safe manner;

(b) 63.173(h)(2)
The process unit within which the agitator is located is an existing source or the permittee designates less than three percent of the total number of agitators in a new source as difficult-to-monitor; and

(c) [63.173(h)(3)]
The permittee follows a written plan that requires monitoring of the agitator at least once per calendar year.

ix. [63.173(i)]
Any agitator that is obstructed by equipment or piping that prevents access to the agitator by a monitor probe is exempt from the monitoring requirements of paragraphs (a) through (d) of 40 CFR 63.173.

x. [63.173(j)]

Any agitator that is designated, as described in 40 CFR 63.181(b)(7)(i) [See section A.III], as an unsafe-to-monitor agitator is exempt from the requirements of paragraphs (a) through (d) of 40 CFR 63.173 if:

(a) [63.173(j)(1)]
The permittee of the agitator determines that the agitator is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraphs (a) through (d) of 40 CFR 63.173; and

(b) [63.173(j)(2)]
The permittee of the agitator has a written plan that requires monitoring of the agitator as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable.

n. 40 CFR 63.174 Standards: Connectors in gas/vapor service and in light liquid service.

i. [63.174(a)]
The permittee of a process unit subject to 40 CFR Part 63, Subpart H shall monitor all connectors in gas/vapor and light liquid service, except as provided in 40 CFR 63.162(b), and in paragraphs (f) through (h) of 40 CFR 63.174, at the intervals specified in paragraph (b) of 40 CFR 63.174.

(a) [63.174(a)(1)]
The connectors shall be monitored to detect leaks by the method specified in 40 CFR 63.180(b).

(b) [63.174(a)(2)]
If an instrument reading greater than or equal to 500 parts per million is measured, a leak is detected.

ii. [63.174(b)]
The permittee shall monitor for leaks at the intervals specified in either paragraph (b)(1) or (b)(2) of 40 CFR 63.174 and in paragraph (b)(3) of 40 CFR 63.174.

(a) [63.174(b)(1)]
For each group of existing process units within an existing source, by no later than 12 months after the compliance date, the permittee shall monitor all connectors, except as provided in paragraphs (f) through (h) of 40 CFR 63.174.

(b) [63.174(b)(2)]
For new sources, within the first 12 months after initial start-up or by no later than 12 months after the date of promulgation of a specific

subpart that references 40 CFR Part 63, Subpart H, whichever is later, the permittee shall monitor all connectors, except as provided in paragraphs (f) through (h) of 40 CFR 63.174.

(c) [63.174(b)(3)]
After conducting the initial survey required in paragraph (b)(1) or (b)(2) of 40 CFR 63.174, the permittee shall perform all subsequent monitoring of connectors at the frequencies specified in paragraphs (b)(3)(i) through (b)(3)(v) of 40 CFR 63.174, except as provided in paragraph (c)(2) of 40 CFR 63.174:

(i) [63.174(b)(3)(i)]
Once per year (i.e., 12-month period), if the percent leaking connectors in the process unit was 0.5 percent or greater during the last required annual or biennial monitoring period.

(ii) [63.174(b)(3)(ii)]
Once every 2 years, if the percent leaking connectors was less than 0.5 percent during the last required monitoring period. A permittee may comply with this paragraph by monitoring at least 40 percent of the connectors in the first year and the remainder of the connectors in the second year. The percent leaking connectors will be calculated for the total of all monitoring performed during the 2-year period.

(iii) [63.174(b)(3)(iii)]
If the permittee of a process unit in a biennial leak detection and repair program calculates less than 0.5 percent leaking connectors from the 2-year monitoring period, the permittee may monitor the connectors one time every 4 years. A permittee may comply with the requirements of this paragraph by monitoring at least 20 percent of the connectors each year until all connectors have been monitored within 4 years.

(iv) [63.174(b)(3)(iv)]
If a process unit complying with the requirements of paragraph (b) of 40 CFR 63.174 using a 4-year monitoring interval program has greater than or equal to 0.5 percent but less than 1 percent leaking connectors, the permittee shall increase the monitoring frequency to one time every 2 years. A permittee may comply with the requirements of this paragraph by monitoring at least 40 percent of the connectors in the first year and the remainder of the connectors in the second year. The permittee may again elect to use the provisions of paragraph (b)(3)(iii) of 40 CFR 63.174 when the percent leaking connectors decreases to less than 0.5 percent.

(v) [63.174(b)(3)(v)]
If a process unit complying with requirements of paragraph (b)(3)(iii) of 40 CFR 63.174 using a 4-year monitoring interval program has 1 percent or greater leaking connectors, the permittee shall increase the monitoring frequency to one time per year. The permittee may again elect to use the provisions of paragraph (b)(3)(iii) of 40 CFR 63.174 when the percent leaking connectors decreases to less than 0.5 percent.

(d) [63.174(b)(4)]
The use of monitoring data generated before April 22, 1994 to qualify for less frequent monitoring is governed by the provisions of 40 CFR 63.180(b)(6) [See section A.V].

iii. (a) (i) [63.174(c)(1)(i)]
Except as provided in paragraph (c)(1)(ii) of 40 CFR 63.174, each connector that has been opened or has otherwise had the seal broken shall be monitored for leaks when it is reconnected or within the first 3 months after being returned to organic hazardous air pollutants service. If the monitoring detects a leak, it shall be repaired according to the provisions of paragraph (d) of 40 CFR 63.174, unless it is determined to be nonrepairable, in which case it is counted as a nonrepairable connector for the purposes of paragraph (i)(2) of 40 CFR 63.174.

(ii) [63.174(c)(1)(ii)]
As an alternative to the requirements in paragraph (c)(1)(i) of 40 CFR 63.174, the permittee may choose not to monitor connectors that have been opened or otherwise had the seal broken. In this case, the permittee may not count nonrepairable connectors for the purposes of paragraph (i)(2) of 40 CFR 63.174. The permittee shall calculate the percent leaking connectors for the monitoring periods described in paragraph (b) of 40 CFR 63.174, by setting the nonrepairable component, CAN, in the equation in paragraph (i)(2) of 40 CFR 63.174 to zero for all monitoring periods.

(iii) [63.174(c)(1)(iii)]
The permittee may switch alternatives described in paragraphs (c)(1)(i) and (ii) of 40 CFR 63.174 at the end of the current monitoring period he is in, provided that it is reported as required in 40 CFR 63.182 [See section A.IV] and begin the new alternative in annual monitoring. The initial monitoring in the new alternative shall be completed no later than 12 months after reporting the switch.

(b) [63.174(c)(2)]
As an alternative to the requirements of paragraph (b)(3) of 40 CFR 63.174, each screwed connector 2 inches or less in nominal inside diameter installed in a process unit before the dates specified in paragraph (c)(2)(iii) or (c)(2)(iv) of 40 CFR 63.174 may:

(i) [63.174(c)(2)(i)]
Comply with the requirements of 40 CFR 63.169, and

(ii) [63.174(c)(2)(ii)]
Be monitored for leaks within the first 3 months after being returned to organic hazardous air pollutants service after having been opened or otherwise had the seal broken. If that monitoring detects a leak, it shall be repaired according to the provisions of paragraph (d) of 40 CFR 63.174.

(iii) [63.174(c)(2)(iii)]
For sources subject to subparts F and I of 40 CFR Part 63, the provisions of paragraph (c)(2) of 40 CFR 63.174 apply to screwed connectors installed before December 31, 1992.

(iv) [63.174(c)(2)(iv)]
For sources not identified in paragraph (c)(2)(iii) of 40 CFR 63.174, the provisions of paragraph (c)(2) of 40 CFR 63.174 apply to screwed connectors installed before the date of proposal of the applicable subpart of 40 CFR Part 63 that references 40 CFR Part 63, Subpart H.

iv. [63.174(d)]
When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in paragraph (g) of 40 CFR 63.174 and in 40 CFR 63.171 . A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

v. [63.174(f)]
Any connector that is designated, as described in 40 CFR 63.181(b)(7)(i) [See section A.IIII], as an unsafe-to-monitor connector is exempt from the requirements of paragraph (a) of 40 CFR 63.174 if:

(a) [63.174(f)(1)]
The permittee determines that the connector is unsafe to monitor because personnel would be exposed to an immediate danger as a result of complying with paragraphs (a) through (e) of 40 CFR 63.174; and

(b) [63.174(f)(2)]

The permittee has a written plan that requires monitoring of the connector as frequently as practicable during safe to monitor periods, but not more frequently than the periodic schedule otherwise applicable.

vi. [63.174(g)]
Any connector that is designated, as described in 40 CFR 63.181(b)(7)(iii) [See section A.III], as an unsafe-to-repair connector is exempt from the requirements of paragraphs (a), (d), and (e) of 40 CFR 63.174 if:

(a) [63.174(g)(1)]
The permittee determines that repair personnel would be exposed to an immediate danger as a consequence of complying with paragraph (d) of 40 CFR 63.174; and

(b) [63.174(g)(2)]
The connector will be repaired before the end of the next scheduled process unit shutdown.

vii. (a) [63.174(h)(1)]
Any connector that is inaccessible or is ceramic or ceramic-lined (e.g., porcelain, glass, or glass-lined), is exempt from the monitoring requirements of paragraphs (a) and (c) of 40 CFR 63.174and from the record keeping and reporting requirements of 40 CFR 63.181 [See section A.III] and 40 CFR 63.182 [See section A.IV].

(i) [63.174(h)(1)(i)]
Buried;

(ii) [63.174(h)(1)(ii)]
Insulated in a manner that prevents access to the connector by a monitor probe;

(iii) [63.174(h)(1)(iii)]
Obstructed by equipment or piping that prevents access to the connector by a monitor probe;

(iv) [63.174(h)(1)(iv)]
Unable to be reached from a wheeled scissor-lift or hydraulic-type scaffold which would allow access to connectors up to 7.6 meters (25 feet) above the ground;

(v) [63.174(h)(1)(v)]
Inaccessible because it would require elevating the monitoring personnel more than 2 meters above a permanent support surface or would require the erection of scaffold; or

(vi) [63.174(h)(1)(vi)]
Not able to be accessed at any time in a safe manner to perform monitoring. Unsafe access includes, but is not limited to, the use of a wheeled scissor-lift on unstable or uneven terrain, the use of a motorized man-lift basket in areas where an ignition potential exists, or access would require near proximity to hazards such as electrical lines, or would risk damage to equipment.

(b) [63.174(h)(2)]
If any inaccessible or ceramic or ceramic-lined connector is observed by visual, audible, olfactory, or other means to be leaking, the leak shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 63.171 [See section A.II] and paragraph (g) of 40 CFR 63.174.

(c) [63.174(h)(3)]
A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

viii. [63.174(i)]
For use in determining the monitoring frequency, as specified in paragraph (b) of 40 CFR 63.174, the percent leaking connectors shall be calculated as specified in paragraphs (i)(1) and (i)(2) of 40 CFR 63.174.

(a) [63.174(i)(1)]
For the first monitoring period, use the following equation:

$$\% CL = CL/(Ct + CC) \times 100$$

where:

% CL = Percent leaking connectors as determined through periodic monitoring required in paragraphs (a) and (b) of 40 CFR 63.174.
CL = Number of connectors measured at 500 parts per million or greater, by the method specified in 40 CFR 63.180(b).
Ct = Total number of monitored connectors in the process unit.
CC = Optional credit for removed connectors = 0.67 × net (i.e., total removed—total added) number of connectors in organic hazardous air pollutants service removed from the process unit after the compliance date set forth in the applicable Subpart For existing process units, and after the date of initial start-up for new process units. If credits are not taken, then CC= 0.

(b) [63.174(i)(2)]
For subsequent monitoring periods, use the following equation:

% CL = [(CL- CAN)/(Ct + CC)] × 100

where:

% CL = Percent leaking connectors as determined through periodic monitoring required in paragraphs (a) and (b) of 40 CFR 63.174.
CL = Number of connectors, including nonrepairables, measured at 500 parts per million or greater, by the method specified in 40 CFR 63.180(b).
CAN = Number of allowable nonrepairable connectors, as determined by monitoring required in paragraphs (b)(3) and (c) of 40 CFR 63.174, not to exceed 2 percent of the total connector population, Ct.
Ct = Total number of monitored connectors, including nonrepairables, in the process unit.
CC = Optional credit for removed connectors = 0.67 × net number (i.e., total removed—total added) of connectors in organic hazardous air pollutants service removed from the process unit after the compliance date set forth in the applicable Subpart For existing process units, and after the date of initial start-up for new process units. If credits are not taken, then CC= 0.

ix. [63.174(j)]
Optional credit for removed connectors. If the permittee eliminates a connector subject to monitoring under paragraph (b) of 40 CFR 63.174, the permittee may receive credit for elimination of the connector, as described in paragraph (i) of 40 CFR 63.174, provided the requirements in paragraphs (j)(1) through (j)(4)are met.

(a) [63.174(j)(1)]
The connector was welded after the date of proposal of the specific subpart that references 40 CFR Part 63, Subpart H.

(b) [63.174(j)(2)]
The integrity of the weld is demonstrated by monitoring it according to the procedures in 40 CFR 63.180(b) or by testing using X-ray, acoustic monitoring, hydrotesting, or other applicable method.

(c) [63.174(j)(3)]
Welds created after the date of proposal but before the date of promulgation of a specific subpart that references 40 CFR Part 63, Subpart H are monitored or tested by 3 months after the compliance date specified in the applicable subpart.

(d) [63.174(j)(4)]
Welds created after promulgation of the subpart that references 40 CFR Part 63, Subpart H are monitored or tested within 3 months after being welded.

(e) [63.174(j)(5)]
If an inadequate weld is found or the connector is not welded completely around the circumference, the connector is not considered a welded connector and is therefore not exempt from the provisions of 40 CFR Part 63, Subpart H.

o. 40 CFR 63.175 Quality improvement program for valves.

i. [63.175(a)]
In Phase III, the permittee may elect to comply with one of the alternative quality improvement programs specified in paragraphs (d) and (e) of 40 CFR 63.175. The decision to use one of these alternative provisions to comply with the requirements of 40 CFR 63.168(d)(1)(ii) must be made during the first year of Phase III for existing process units and for new process units.

ii. [63.175(b)]
The permittee of a process unit subject to the requirements of paragraphs (d) or (e) of 40 CFR 63.175 shall comply with those requirements until the process unit has fewer than 2 percent leaking valves, calculated as a rolling average of 2 consecutive quarters, as specified in 40 CFR 63.168(e) [See section A.II].

iii. [63.175(c)]
After the process unit has fewer than 2 percent leaking valves, the permittee may elect to comply with the requirements in 40 CFR 63.168 [See section A.II], to continue to comply with the requirements in paragraph (e) [or (d), if appropriate] of 40 CFR 63.175, or comply with both the requirements in 40 CFR 63.168 and 40 CFR 63.175.

(a) [63.175(c)(1)]
If the permittee elects to continue the quality improvement program, the permittee is exempt from the requirements for performance trials as specified in paragraph (e)(6) of 40 CFR 63.175, or further progress as specified in paragraph (d)(4) of 40 CFR 63.175, as long as the process unit has fewer than 2 percent leaking valves calculated according to 40 CFR 63.168(e) [See section A.II].

(b) [63.175(c)(2)]
If the permittee elects to comply with both paragraph (e) of 40 CFR 63.175 and 40 CFR 63.168, he may also take advantage of the lower monitoring frequencies associated with lower leak rates in 40 CFR 63.168(d)(2), (d)(3), and (d)(4) [See section A.II].

(c) [63.175(c)(3)]
If the permittee elects not to continue the quality improvement program, the program is no longer an option if the process unit again

exceeds 2 percent leaking valves, and in such case, monthly monitoring will be required.

iv. [63.175(d)]
The following requirements shall be met if the permittee elects to use a quality improvement program to demonstrate further progress:

(a) [63.175(d)(1)]
The permittee shall continue to comply with the requirements in 40 CFR 63.168 [See section A.II] except each valve shall be monitored quarterly.

(b) [63.175(d)(2)]
The permittee shall collect the following data, and maintain records as required in 40 CFR 63.181(h)(1), for each valve in each process unit subject to the quality improvement program:

(i) [63.175(d)(2)(i)]
The maximum instrument reading observed in each monitoring observation before repair, the response factor for the stream if appropriate, the instrument model number, and date of the observation.

(ii) [63.175(d)(2)(ii)]
Whether the valve is in gas or light liquid service.

(iii) [63.175(d)(2)(iii)]
If a leak is detected, the repair methods used and the instrument readings after repair.

(c) [63.175(d)(3)]
The permittee shall continue to collect data on the valves as long as the process unit remains in the quality improvement program.

(d) [63.175(d)(4)]
The permittee must demonstrate progress in reducing the percent leaking valves each quarter the process unit is subject to the requirements of paragraph (d) of 40 CFR 63.175, except as provided in paragraphs (d)(4)(ii) and (d)(4)(iii) of 40 CFR 63.175.

(i) [63.175(d)(4)(i)]
Demonstration of progress shall mean that for each quarter there is at least a 10-percent reduction in the percent leaking valves from the percent leaking valves determined for the preceding monitoring period. The percent leaking valves shall be calculated as a rolling average of two consecutive quarters of monitoring data. The percent reduction shall be calculated

using the rolling average percent leaking valves, according to the following:

%LVR = (%LVAVG1 - %LVAVG2/%LVAVG1 x 100

where:

%LVR = Percent leaking valve reduction.
%LVAVG1 = (%VLi + %VLi = 1)/2.
%LVAVG2 = (%VLi + 1 + %VLi = 2)/2.

where:

%VLi, %V Li = 1, %VLi = 2
are percent leaking valves calculated for subsequent monitoring periods, i, i+1, i+2.

(ii) [63.175(d)(4)(ii)]
The permittee who fails for two consecutive rolling averages to demonstrate at least a 10-percent reduction per quarter in percent leaking valves, and whose overall average percent reduction based on two or more rolling averages is less than 10 percent per quarter, shall either comply with the requirements in 40 CFR 63.168(d)(1)(i) using monthly monitoring or shall comply using a quality improvement program for technology review as specified in paragraph (e) of 40 CFR 63.175. If the permittee elects to comply with the requirements of paragraph (e) of 40 CFR 63.175, the schedule for performance trials and valve replacements remains as specified in paragraph (e) of 40 CFR 63.175.

(iii) [63.175(d)(4)(iii)]
As an alternative to the provisions in paragraph (d)(4)(i), the permittee may use the procedure specified in paragraphs (d)(4)(iii)(A) and (d)(4)(iii)(B) of 40 CFR 63.175 to demonstrate progress in reducing the percent leaking valves.

(aa) [63.175(d)(4)(iii)(A)]
The percent reduction that must be achieved each quarter shall be calculated as follows:

%RR = percent reduction required each quarter, as calculated according to 40 CFR 63.168(e)
%VL = percent leaking valves, calculated according to 40 CFR 63.168(e), at the time elected to use provisions of 40 CFR 63.168(d)(1)(ii)

(bb) [63.175(d)(4)(iii)(B)]
The permittee shall achieve less than 2 percent leaking valves no later than 2 years after electing to use the demonstration of progress provisions in 40 CFR 63.175(d) .

v. [63.175(e)]
The following requirements shall be met if the permittee elects to use a quality improvement program of technology review and improvement:

(a) [63.175(e)(1)]
The permittee shall comply with the requirements in 40 CFR 63.168 except the requirement for monthly monitoring in 40 CFR 63.168(d)(1)(i) [See section A.II] does not apply.

(b) [63.175(e)(2)]
The permittee shall collect the data specified below, and maintain records as required in 40 CFR 63.181(h)(2), for each valve in each process unit subject to the quality improvement program. The data may be collected and the records may be maintained on a process unit or group of process units basis. The data shall include the following:

(i) [63.175(e)(2)(i)]
Valve type (e.g., ball, gate, check); valve manufacturer; valve design (e.g., external stem or actuating mechanism, flanged body); materials of construction; packing material; and year installed.

(ii) [63.175(e)(2)(ii)]
Service characteristics of the stream such as operating pressure, temperature, line diameter, and corrosivity.

(iii) [63.175(e)(2)(iii)]
Whether the valve is in gas or light liquid service.

(iv) [63.175(e)(2)(iv)]
The maximum instrument readings observed in each monitoring observation before repair, response factor for the stream if adjusted, instrument model number, and date of the observation.

(v) [63.175(e)(2)(v)]
If a leak is detected, the repair methods used and the instrument readings after repair.

(vi) [63.175(e)(2)(vi)]

If the data will be analyzed as part of a larger analysis program involving data from other plants or other types of process units, a description of any maintenance or quality assurance programs used in the process unit that are intended to improve emission performance.

(c) [63.175(e)(3)]
The permittee shall continue to collect data on the valves as long as the process unit remains in the quality improvement program.

(d) [63.175(e)(4)]
The permittee shall inspect all valves removed from the process unit due to leaks. The inspection shall determine which parts of the valve have failed and shall include recommendations, as appropriate, for design changes or changes in specifications to reduce leak potential.

(e) (i) [63.175(e)(5)(i)]
The permittee shall analyze the data collected to comply with the requirements of paragraph (e)(2) of 40 CFR 63.175 to determine the services, operating or maintenance practices, and valve designs or technologies that have poorer than average emission performance and those that have better than average emission performance. The analysis shall determine if specific trouble areas can be identified on the basis of service, operating conditions or maintenance practices, equipment design, or other process specific factors.

(ii) [63.175(e)(5)(ii)]
The analysis shall also be used to identify any superior performing valve technologies that are applicable to the service(s), operating conditions, or valve designs associated with poorer than average emission performance. A superior performing valve technology is one for which a group of such valves has a leak frequency of less than 2 percent for specific applications in such a process unit. A candidate superior performing valve technology is one demonstrated or reported in the available literature or through a group study as having low emission performance and as being capable of achieving less than 2 percent leaking valves in the process unit.

(iii) [63.175(e)(5)(iii)]
The analysis shall include consideration of:

(aa) [63.175(e)(5)(iii)(A)]
The data obtained from the inspections of valves removed from the process unit due to leaks,

(bb) [63.175(e)(5)(iii)(B)]
Information from the available literature and from the experience of other plant sites that will identify valve designs or technologies and operating conditions associated with low emission performance for specific services, and

(cc) [63.175(e)(5)(iii)(C)]
Information on limitations on the service conditions for the valve design and operating conditions as well as information on maintenance procedures to ensure continued low emission performance.

(iv) [63.175(e)(5)(iv)]
The data analysis may be conducted through an inter- or intra-company program (or through some combination of the two approaches) and may be for a single process unit, a company, or a group of process units.

(v) [63.175(e)(5)(v)]
The first analysis of the data shall be completed no later than 18 months after the start of Phase III. The first analysis shall be performed using a minimum of two quarters of data. An analysis of the data shall be done each year the process unit is in the quality improvement program.

(f) [63.175(e)(6)]
A trial evaluation program shall be conducted at each plant site for which the data analysis does not identify superior performing valve designs or technologies that can be applied to the operating conditions and services identified as having poorer than average performance, except as provided in paragraph (e)(6)(v) of 40 CFR 63.175. The trial program shall be used to evaluate the feasibility of using in the process unit the valve designs or technologies that have been identified by others as having low emission performance.

(i) [63.175(e)(6)(i)]
The trial program shall include on-line trials of valves or operating and maintenance practices that have been identified in the available literature or in analysis by others as having the ability to perform with leak rates below 2 percent in similar services, as having low probability of failure, or as having no external actuating mechanism in contact with the process fluid. If any of the candidate superior performing valve technologies is not included in the performance trials, the reasons for rejecting specific technologies from consideration shall be

documented as required in 40 CFR 63.181(h)(5)(ii) [See section A.III].

(ii) [63.175(e)(6)(ii)]
The number of valves in the trial evaluation program shall be the lesser of 1 percent or 20 valves for programs involving single process units and the lesser of 1 percent or 50 valves for programs involving groups of process units.

(iii) [63.175(e)(6)(iii)]
The trial evaluation program shall specify and include documentation of:

(aa) [63.175(e)(6)(iii)(A)]
The candidate superior performing valve designs or technologies to be evaluated, the stages for evaluating the identified candidate valve designs or technologies, including the estimated time period necessary to test the applicability;

(bb) [63.175(e)(6)(iii)(B)]
The frequency of monitoring or inspection of the equipment;

(cc) [63.175(e)(6)(iii)(C)]
The range of operating conditions over which the component will be evaluated; and

(dd) [63.175(e)(6)(iii)(D)]
Conclusions regarding the emission performance and the appropriate operating conditions and services for the trial valves.

(iv) [63.175(e)(6)(iv)]
The performance trials shall initially be conducted for, at least, a 6-month period beginning not later than 18 months after the start of Phase III. Not later than 24 months after the start of Phase III, the permittee shall have identified valve designs or technologies that, combined with appropriate process, operating, and maintenance practices, operate with low emission performance for specific applications in the process unit. The permittee shall continue to conduct performance trials as long as no superior performing design or technology has been identified, except as provided in paragraph (e)(6)(vi) of 40 CFR 63.175. The compilation of candidate and demonstrated superior emission performance valve designs or technologies

shall be amended in the future, as appropriate, as additional information and experience is obtained.

(v) [63.175(e)(6)(v)]
Any plant site with fewer than 400 valves and owned by a corporation with fewer than 100 total employees shall be exempt from trial evaluations of valves. Plant sites exempt from the trial evaluations of valves shall begin the program at the start of the fourth year of Phase III.

(vi) [63.175(e)(6)(vi)]
The permittee who has conducted performance trials on all candidate superior emission performance technologies suitable for the required applications in the process unit may stop conducting performance trials provided that a superior performing design or technology has been demonstrated or there are no technically feasible candidate superior technologies remaining. The permittee shall prepare an engineering evaluation documenting the physical, chemical, or engineering basis for the judgment that the superior emission performance technology is technically infeasible or demonstrating that it would not reduce emissions.

(g) [63.175(e)(7)]
Each permittee who elects to use a quality improvement program for technology review and improvement shall prepare and implement a valve quality assurance program that details purchasing specifications and maintenance procedures for all valves in the process unit. The quality assurance program may establish any number of categories, or classes, of valves as needed to distinguish among operating conditions and services associated with poorer than average emission performance as well as those associated with better than average emission performance. The quality assurance program shall be developed considering the findings of the data analysis required under paragraph (e)(5) of 40 CFR 63.175, if applicable, the findings of the trial evaluation required in paragraph (e)(6) of 40 CFR 63.175, and the operating conditions in the process unit. The quality assurance program shall be reviewed and, as appropriate, updated each year as long as the process unit has 2 percent or more leaking valves.

(i) [63.175(e)(7)(i)]
The quality assurance program shall:

(aa) [63.175(e)(7)(i)(A)]
Establish minimum design standards for each category of valves. The design standards shall specify known critical parameters such as tolerance, manufacturer,

materials of construction, previous usage, or other applicable identified critical parameters;

(bb) [63.175(e)(7)(i)(B)]
Require that all equipment orders specify the design standard (or minimum tolerances) for the valve;

(cc) [63.175(e)(7)(i)(C)]
Include a written procedure for bench testing of valves that specifies performance criteria for acceptance of valves and specifies criteria for the precision and accuracy of the test apparatus. All valves repaired off-line after preparation of the quality assurance plan shall be bench-tested for leaks. This testing may be conducted by the permittee of the process unit, by the vendor, or by a designated representative. The permittee shall install only those valves that have been documented through bench-testing to be nonleaking.

(dd) [63.175(e)(7)(i)(D)]
Require that all valves repaired on-line be monitored using the method specified in 40 CFR 63.180(b) [See section A.V] for leaks for 2 successive months, after repair.

(ee) [63.175(e)(7)(i)(E)]
Provide for an audit procedure for quality control of purchased equipment to ensure conformance with purchase specifications. The audit program may be conducted by the permittee of the process unit or by a designated representative.

(ff) [63.175(e)(7)(i)(F)]
Detail off-line valve maintenance and repair procedures. These procedures shall include provisions to ensure that rebuilt or refurbished valves will meet the design specifications for the valve type and will operate such that emissions are minimized.

(ii) [63.175(e)(7)(ii)]
The quality assurance program shall be established no later than the start of the third year of Phase III for plant sites with 400 or more valves or owned by a corporation with 100 or more employees; and no later than the start of the fourth year of Phase III for plant sites with less than 400 valves and owned by a corporation with less than 100 employees.

(h) [63.175(e)(8)]
Beginning at the start of the third year of Phase III for plant sites with 400 or more valves or owned by a corporation with 100 or more employees and at the start of the fourth year of Phase III for plant sites with less than 400 valves and owned by a corporation with less than 100 employees, each valve that is replaced for any reason shall be replaced with a new or modified valve that complies with the quality assurance standards for the valve category and that is identified as superior emission performance technology. Superior emission performance technology means valves or valve technologies identified with emission performance that, combined with appropriate process, operating, and maintenance practices, will result in less than 2 percent leaking valves for specific applications in a large population, except as provided in paragraph (e)(8)(ii) of 40 CFR 63.175.

(i) [63.175(e)(8)(i)]
The valves shall be maintained as specified in the quality assurance program.

(ii) [63.175(e)(8)(ii)]
If a superior emission performance technology cannot be identified, then valve replacement shall be with one of (if several) the lowest emission performance technologies that has been identified for the specific application.

p. 40 CFR 63.176 Quality improvement program for pumps.

i. [63.176(a)]
In Phase III, if, on a 6-month rolling average, the greater of either 10 per cent of the pumps in a process unit (or plant site) or three pumps in a process unit (or plant site) leak, the permittee shall comply with the requirements of 40 CFR 63.176 as specified below:

(a) [63.176(a)(1)]
Pumps that are in food/medical service or in polymerizing monomer service shall comply with all requirements except for those specified in paragraph (d)(8) of 40 CFR 63.176.

(b) [63.176(a)(2)]
Pumps that are not in food/medical or polymerizing monomer service shall comply with all requirements of 40 CFR 63.176.

ii. [63.176(b)]
The permittee shall comply with the requirements of 40 CFR 63.176 until the number of leaking pumps is less than the greater of either 10 percent of the pumps or three pumps, calculated as a 6-month rolling average, in the process

unit (or plant site). Once the performance level is achieved, the permittee shall comply with the requirements in 40 CFR 63.163 [See section A.II].

iii. [63.176(c)]
If in a subsequent monitoring period, the process unit (or plant site) has greater than 10 percent of the pumps leaking or three pumps leaking (calculated as a 6-month rolling average), the permittee shall resume the quality improvement program starting at performance trials.

iv. [63.176(d)]
The quality improvement program shall include the following:

(a) [63.176(d)(1)]
The permittee shall comply with the requirements in 40 CFR 63.163 [See section A.II].

(b) [63.176(d)(2)]
The permittee shall collect the following data, and maintain records as required in 40 CFR 63.181(h)(3), for each pump in each process unit (or plant site) subject to the quality improvement program. The data may be collected and the records may be maintained on a process unit or plant site basis.

(i) [63.176(d)(2)(i)]
Pump type (e.g., piston, horizontal or vertical centrifugal, gear, bellows); pump manufacturer; seal type and manufacturer; pump design (e.g., external shaft, flanged body); materials of construction; if applicable, barrier fluid or packing material; and year installed.

(ii) [63.176(d)(2)(ii)]
Service characteristics of the stream such as discharge pressure, temperature, flow rate, corrosivity, and annual operating hours.

(iii) [63.176(d)(2)(iii)]
The maximum instrument readings observed in each monitoring observation before repair, response factor for the stream if appropriate, instrument model number, and date of the observation.

(iv) [63.176(d)(2)(iv)]
If a leak is detected, the repair methods used and the instrument readings after repair.

(v) [63.176(d)(2)(v)]
If the data will be analyzed as part of a larger analysis program involving data from other plants or other types of process units,

a description of any maintenance or quality assurance programs used in the process unit that are intended to improve emission performance.

(c) [63.176(d)(3)]
The permittee shall continue to collect data on the pumps as long as the process unit (or plant site) remains in the quality improvement program.

(d) [63.176(d)(4)]
The permittee shall inspect all pumps or pump seals which exhibited frequent seal failures and were removed from the process unit due to leaks. The inspection shall determine the probable cause of the pump seal failure or of the pump leak and shall include recommendations, as appropriate, for design changes or changes in specifications to reduce leak potential.

(e) (i) [63.176(d)(5)(i)]
The permittee shall analyze the data collected to comply with the requirements of paragraph (d)(2) of 40 CFR 63.176 to determine the services, operating or maintenance practices, and pump or pump seal designs or technologies that have poorer than average emission performance and those that have better than average emission performance. The analysis shall determine if specific trouble areas can be identified on the basis of service, operating conditions or maintenance practices, equipment design, or other process specific factors.

(ii) [63.176(d)(5)(ii)]
The analysis shall also be used to determine if there are superior performing pump or pump seal technologies that are applicable to the service(s), operating conditions, or pump or pump seal designs associated with poorer than average emission performance. A superior performing pump or pump seal technology is one with a leak frequency of less than 10 percent for specific applications in the process unit or plant site. A candidate superior performing pump or pump seal technology is one demonstrated or reported in the available literature or through a group study as having low emission performance and as being capable of achieving less than 10 percent leaking pumps in the process unit (or plant site).

(iii) [63.176(d)(5)(iii)]
The analysis shall include consideration of:

(aa) [63.176(d)(5)(iii)(A)]

The data obtained from the inspections of pumps and pump seals removed from the process unit due to leaks;

(bb) [63.176(d)(5)(iii)(B)]
Information from the available literature and from the experience of other plant sites that will identify pump designs or technologies and operating conditions associated with low emission performance for specific services; and

(cc) [63.176(d)(5)(iii)(C)]
Information on limitations on the service conditions for the pump seal technology operating conditions as well as information on maintenance procedures to ensure continued low emission performance.

(iv) [63.176(d)(5)(iv)]
The data analysis may be conducted through an inter- or intra-company program (or through some combination of the two approaches) and may be for a single process unit, a plant site, a company, or a group of process units.

(v) [63.176(d)(5)(v)]
The first analysis of the data shall be completed no later than 18 months after the start of the quality improvement program. The first analysis shall be performed using a minimum of 6 months of data. An analysis of the data shall be done each year the process unit is in the quality improvement program.

(f) [63.176(d)(6)]
A trial evaluation program shall be conducted at each plant site for which the data analysis does not identify use of superior performing pump seal technology or pumps that can be applied to the areas identified as having poorer than average performance, except as provided in paragraph (d)(6)(v) of 40 CFR 63.176. The trial program shall be used to evaluate the feasibility of using in the process unit (or plant site) the pump designs or seal technologies, and operating and maintenance practices that have been identified by others as having low emission performance.

(i) [63.176(d)(6)(i)]
The trial program shall include on-line trials of pump seal technologies or pump designs and operating and maintenance practices that have been identified in the available literature or in analysis by others as having the ability to perform with leak rates below 10 percent in similar services, as having low probability of failure, or as having no external actuating

mechanism in contact with the process fluid. If any of the candidate superior performing pump seal technologies or pumps is not included in the performance trials, the reasons for rejecting specific technologies from consideration shall be documented as required in 40 CFR 63.181(h)(5)(ii) [See section A.III].

(ii) [63.176(d)(6)(ii)]
The number of pump seal technologies or pumps in the trial evaluation program shall be the lesser of 1 percent or two pumps for programs involving single process units and the lesser of 1 percent or five pumps for programs involving a plant site or groups of process units. The minimum number of pumps or pump seal technologies in a trial program shall be one.

(iii) [63.176(d)(6)(iii)]
The trial evaluation program shall specify and include documentation of:

(aa) [63.176(d)(6)(iii)(A)]
The candidate superior performing pump seal designs or technologies to be evaluated, the stages for evaluating the identified candidate pump designs or pump seal technologies, including the time period necessary to test the applicability;

(bb) [63.176(d)(6)(iii)(B)]
The frequency of monitoring or inspection of the equipment;

(cc) [63.176(d)(6)(iii)(C)]
The range of operating conditions over which the component will be evaluated; and

(dd) [63.176(d)(6)(iii)(D)]
Conclusions regarding the emission performance and the appropriate operating conditions and services for the trial pump seal technologies or pumps.

(iv) [63.176(d)(6)(iv)]
The performance trials shall initially be conducted, at least, for a 6-month period beginning not later than 18 months after the start of the quality improvement program. No later than 24 months after the start of the quality improvement program, the permittee shall have identified pump seal technologies or pump designs that, combined with appropriate process, operating, and

maintenance practices, operate with low emission performance for specific applications in the process unit. The permittee shall continue to conduct performance trials as long as no superior performing design or technology has been identified, except as provided in paragraph (d)(6)(vi) of 40 CFR 63.176. The initial list of superior emission performance pump designs or pump seal technologies shall be amended in the future, as appropriate, as additional information and experience is obtained.

(v) [63.176(d)(6)(v)]
Any plant site with fewer than 400 valves and owned by a corporation with fewer than 100 employees shall be exempt from trial evaluations of pump seals or pump designs. Plant sites exempt from the trial evaluations of pumps shall begin the pump seal or pump replacement program at the start of the fourth year of the quality improvement program.

(vi) [63.176(d)(6)(vi)]
The permittee who has conducted performance trials on all alternative superior emission performance technologies suitable for the required applications in the process unit may stop conducting performance trials provided that a superior performing design or technology has been demonstrated or there are no technically feasible alternative superior technologies remaining. The permittee shall prepare an engineering evaluation documenting the physical, chemical, or engineering basis for the judgment that the superior emission performance technology is technically infeasible or demonstrating that it would not reduce emissions.

(g) [63.176(d)(7)]
Each permittee shall prepare and implement a pump quality assurance program that details purchasing specifications and maintenance procedures for all pumps and pump seals in the process unit. The quality assurance program may establish any number of categories, or classes, of pumps as needed to distinguish among operating conditions and services associated with poorer than average emission performance as well as those associated with better than average emission performance. The quality assurance program shall be developed considering the findings of the data analysis required under paragraph (d)(5) of 40 CFR 63.176, if applicable, the findings of the trial evaluation required in paragraph (d)(6) of 40 CFR 63.176, and the operating conditions in the process unit. The quality assurance program shall be updated each year as long as the process unit has the greater of either 10 percent or more leaking pumps or has three leaking pumps.

(i) [63.176(d)(7)(i)]
The quality assurance program shall:

(aa) [63.176(d)(7)(i)(A)]
Establish minimum design standards for each category of pumps or pump seal technology. The design standards shall specify known critical parameters such as tolerance, manufacturer, materials of construction, previous usage, or other applicable identified critical parameters;

(bb) [63.176(d)(7)(i)(B)]
Require that all equipment orders specify the design standard (or minimum tolerances) for the pump or the pump seal;

(cc) [63.176(d)(7)(i)(C)]
Provide for an audit procedure for quality control of purchased equipment to ensure conformance with purchase specifications. The audit program may be conducted by the permittee of the plant site or process unit or by a designated representative; and

(dd) [63.176(d)(7)(i)(D)]
Detail off-line pump maintenance and repair procedures. These procedures shall include provisions to ensure that rebuilt or refurbished pumps and pump seals will meet the design specifications for the pump category and will operate such that emissions are minimized.

(ii) [63.176(d)(7)(ii)]
The quality assurance program shall be established no later than the start of the third year of the quality improvement program for plant sites with 400 or more valves or 100 or more employees; and no later than the start of the fourth year of the quality improvement program for plant sites with less than 400 valves and less than 100 employees.

(h) [63.176(d)(8)]
Beginning at the start of the third year of the quality improvement program for plant sites with 400 or more valves or 100 or more employees and at the start of the fourth year of the quality improvement program for plant sites with less than 400 valves and less than 100 employees, the permittee shall replace, as described in paragraphs (d)(8)(i) and (d)(8)(ii) of 40 CFR 63.176, the pumps or pump seals that are not superior emission performance technology with

pumps or pump seals that have been identified as superior emission performance technology and that comply with the quality assurance standards for the pump category. Superior emission performance technology is that category or design of pumps or pump seals with emission performance which, when combined with appropriate process, operating, and maintenance practices, will result in less than 10 percent leaking pumps for specific applications in the process unit or plant site. Superior emission performance technology includes material or design changes to the existing pump, pump seal, seal support system, installation of multiple mechanical seals or equivalent, or pump replacement.

(i) [63.176(d)(8)(i)]
Pumps or pump seals shall be replaced at the rate of 20 percent per year based on the total number of pumps in light liquid service. The calculated value shall be rounded to the nearest nonzero integer value. The minimum number of pumps or pump seals shall be one. Pump replacement shall continue until all pumps subject to the requirements of 40 CFR 63.163 [See section A.II] are pumps determined to be superior performance technology.

(ii) [63.176(d)(8)(ii)]
The permittee may delay replacement of pump seals or pumps with superior technology until the next planned process unit shutdown, provided the number of pump seals and pumps replaced is equivalent to the 20 percent or greater annual replacement rate.

(iii) [63.176(d)(8)(iii)]
The pumps shall be maintained as specified in the quality assurance program.

q. 40 CFR 63.177 Alternative means of emission limitation: General.

i. [63.177(a)]
Permission to use an alternative means of emission limitation under section 112(h)(3) of the Act shall be governed by the following procedures in paragraphs (b) through (e) of 40 CFR 63.177.

ii. [63.177(b)]
Where the standard is an equipment, design, or operational requirement:

(a) [63.177(b)(1)]
Each permittee applying for permission to use an alternative means of emission limitation under 40 CFR 63.6(g) of Subpart A of 40 CFR Part 63 shall be responsible for collecting and verifying emission performance test data for an alternative means of emission limitation.

(b) [63.177(b)(2)]
The Administrator will compare test data for the means of emission limitation to test data for the equipment, design, and operational requirements.

(c) [63.177(b)(3)]
The Administrator may condition the permission on requirements that may be necessary to ensure operation and maintenance to achieve the same emission reduction as the equipment, design, and operational requirements.

iii. [63.177(c)]
Where the standard is a work practice:

(a) [63.177(c)(1)]
Each permittee applying for permission shall be responsible for collecting and verifying test data for an alternative means of emission limitation.

(b) [63.177(c)(2)]
For each kind of equipment for which permission is requested, the emission reduction achieved by the required work practices shall be demonstrated for a minimum period of 12 months.

(c) [63.177(c)(3)]
For each kind of equipment for which permission is requested, the emission reduction achieved by the alternative means of emission limitation shall be demonstrated.

(d) [63.177(c)(4)]
Each permittee applying for permission shall commit, in writing, for each kind of equipment to work practices that provide for emission reductions equal to or greater than the emission reductions achieved by the required work practices.

(e) [63.177(c)(5)]
The Administrator will compare the demonstrated emission reduction for the alternative means of emission limitation to the demonstrated emission reduction for the required work practices and will consider the commitment in paragraph (c)(4) of 40 CFR 63.177.

(f) [63.177(c)(6)]
The Administrator may condition the permission on requirements that may be necessary to ensure operation and maintenance to achieve the same or greater emission reduction as the required work practices of 40 CFR Part 63, Subpart H.

iv. [63.177(d)]
The permittee may offer a unique approach to demonstrate the alternative means of emission limitation.

v. (a) [63.177(e)(1)]
Manufacturers of equipment used to control equipment leaks of an organic HAP may apply to the Administrator for permission for an alternative means of emission limitation that achieves a reduction in emissions of the organic HAP achieved by the equipment, design, and operational requirements of 40 CFR Part 63, Subpart H.

(b) [63.177(e)(2)]
The Administrator will grant permission according to the provisions of paragraphs (b), (c), and (d) of 40 CFR 63.177.

r. 40 CFR 63.178 Alternative means of emission limitation: Batch processes.

i. [63.178(a)]
As an alternative to complying with the requirements of 40 CFR 63.163 through 63.171 and 40 CFR 63.173 through 63.176 [See section A.II], the permittee of a batch process that operates in organic HAP service during the calendar year may comply with one of the standards specified in paragraphs (b) and (c) of 40 CFR 63.178, or the permittee may petition for approval of an alternative standard under the provisions of 40 CFR 63.177 [See section A.II]. The alternative standards of 40 CFR 63.178 provide the options of pressure testing or monitoring the equipment for leaks. The permittee may switch among the alternatives provided the change is documented as specified in 40 CFR 63.181 [See section A.III].

ii. [63.178(b)]
The following requirements shall be met if the permittee elects to use pressure testing of batch product-process equipment to demonstrate compliance with 40 CFR Part 63, Subpart H. The permittee who complies with the provisions of this paragraph is exempt from the monitoring provisions of 40 CFR 63.163, 63.168 and 63.169, and 63.173 through 63.176 [See section A.II].

(a) [63.178(b)(1)]
Each time equipment is reconfigured for production of a different product or intermediate, the batch product-process equipment train shall be pressure-tested for leaks before organic HAP is first fed to the equipment and the equipment is placed in organic HAP service.

(i) [63.178(b)(1)(i)]
When the batch product-process train is reconfigured to produce a different product, pressure testing is required only for the new or disturbed equipment.

(ii) [63.178(b)(1)(ii)]
Each batch product process that operates in organic HAP service during a calendar year shall be pressure tested at least once during that calendar year.

(iii) [63.178(b)(1)(iii)]
Pressure testing is not required for routine seal breaks, such as changing hoses or filters, which are not part of the reconfiguration to produce a different product or intermediate.

(b) [63.178(b)(2)]
The batch product process equipment shall be tested either using the procedures specified in 40 CFR 63.180(f) for pressure or vacuum loss or with a liquid using the procedures specified in 40 CFR 63.180(g) [See section A.V].

(c) (i) [63.178(b)(3)(i)]
For pressure or vacuum tests, a leak is detected if the rate of change in pressure is greater than 6.9 kilopascals (1 psig) in 1 hour or if there is visible, audible, or olfactory evidence of fluid loss.

(ii) [63.178(b)(3)(ii)]
For pressure tests using a liquid, a leak is detected if there are indications of liquids dripping or if there is other evidence of fluid loss.

(d) (i) [63.178(b)(4)(i)]
If a leak is detected, it shall be repaired and the batch product-process equipment shall be retested before start-up of the process.

(ii) [63.178(b)(4)(ii)]
If a batch product-process fails the retest or the second of two consecutive pressure tests, it shall be repaired as soon as practicable, but not later than 30 calendar days after the second pressure test, provided the conditions specified in paragraph (d) of 40 CFR 63.178 are met.

iii. [63.178(c)]
The following requirements shall be met if the permittee elects to monitor the equipment to detect leaks by the method specified in 40 CFR 63.180(b) [See section A.V] to demonstrate compliance with 40 CFR Part 63, Subpart H.

(a) [63.178(c)(1)]
The permittee shall comply with the requirements of 40 CFR 63.163 through 63.170, and 40 CFR 63.172 through 63.176 [See section A.II].

(b) [63.178(c)(2)]
The equipment shall be monitored for leaks by the method specified in 40 CFR 63.180(b) when the equipment is in organic HAP service, in use with an acceptable surrogate volatile organic compound which is not an organic HAP, or is in use with any other detectable gas or vapor.

(c) [63.178(c)(3)]
The equipment shall be monitored for leaks as specified below:

(i) [63.178(c)(3)(i)]
Each time the equipment is reconfigured for the production of a new product, the reconfigured equipment shall be monitored for leaks within 30 days of start-up of the process. This initial monitoring of reconfigured equipment shall not be included in determining percent leaking equipment in the process unit.

(ii) [63.178(c)(3)(ii)]
Connectors shall be monitored in accordance with the requirements in 40 CFR 63.174 [See section A.II].

(iii) [63.178(c)(3)(iii)]
Equipment other than connectors shall be monitored at the frequencies specified in table 1 of 40 CFR Part 63, Subpart H [See section A.VI]. The operating time shall be determined as the proportion of the year the batch product-process that is subject to the provisions of 40 CFR Part 63, Subpart H is operating.

(iv) [63.178(c)(3)(iv)]
The monitoring frequencies specified in table 1 of 40 CFR Part 63, Subpart H [See section A.VI] are not requirements for monitoring at specific intervals and can be adjusted to accommodate process operations. The permittee may monitor anytime during the specified monitoring period (e.g., month, quarter, year), provided the monitoring is conducted at a reasonable interval after completion of the last monitoring campaign. For example, if the equipment is not operating during the scheduled monitoring period, the monitoring can be done during the next period when the process is operating.

(d) [63.178(c)(4)]
If a leak is detected, it shall be repaired as soon as practicable but not later than 15 calendar days after it is detected, except as provided in paragraph (d) of 40 CFR 63.178.

iv. [63.178(d)]

Delay of repair of equipment for which leaks have been detected is allowed if the replacement equipment is not available providing the following conditions are met:

(a) [63.178(d)(1)]
Equipment supplies have been depleted and supplies had been sufficiently stocked before the supplies were depleted.

(b) [63.178(d)(2)]
The repair is made no later than 10 calendar days after delivery of the replacement equipment.

s. 40 CFR 63.179 Alternative means of emission limitation: Enclosed-vented process units.

Process units enclosed in such a manner that all emissions from equipment leaks are vented through a closed-vent system to a control device meeting the requirements of 40 CFR 63.172 are exempt from the requirements of 40 CFR 63.163 through 63.171, and 40 CFR 63.173 and 63.174 [See section A.II]. The enclosure shall be maintained under a negative pressure at all times while the process unit is in operation to ensure that all emissions are routed to a control device.

4. 40 CFR Part 61, Subpart FF - National Emission Standard for Benzene Waste Operations

a. [61.340] Applicability

i. [61.340(c)]
The following waste is exempt from the requirements of 40 CFR Part 61, Subpart FF.

(a) Waste in the form of gases or vapors that is emitted from process fluids; and,
(b) Waste that is contained in a segregated stormwater sewer system.

ii. [61.340(d)]
Any gaseous stream from a waste management unit, treatment process, or wastewater treatment system routed to a fuel gas system, as defined in 40 CFR 61.341, is exempt from 40 CFR Part 61, Subpart FF. No testing, monitoring, record keeping, or reporting is required under 40 CFR Part 61, Subpart FF for any gaseous stream from a waste management unit, treatment process, or wastewater treatment unit routed to a fuel gas system.

b. [61.342] GENERAL STANDARDS

i. [61.342(a)]
The permittee shall be exempt from the requirements of 40 CFR 61.342(b) and (c) if the total annual benzene quantity from facility waste is less than 10

megagrams per year (Mg/yr)(11 tons/yr). The total annual benzene quantity from facility waste is the sum of the annual benzene quantity for each waste stream at the facility that has a flow-weighted annual average water content greater than 10 percent or that is mixed with water, or other wastes, at any time and the mixture has an annual average water content greater than 10 percent. The benzene quantity in a waste stream is to be counted only once without multiple counting if other waste streams are mixed with or generated from the original waste stream. Other specific requirements for calculating the total annual benzene waste quantity are as follows:

(a) [61.342(a)(1)]
Wastes that are exempted from control under 40 CFR 61.342(c)(2) and 61.342(c)(3) are included in the calculation of the total annual benzene quantity if they have an annual average water content greater than 10 percent, or if they are mixed with water or other wastes at any time and the mixture has an annual average water content greater than 10 percent.

(b) [61.342(a)(2)]
The benzene in a material subject to 40 CFR Part 61, Subpart FF that is sold is included in the calculation of the total annual benzene quantity if the material has an annual average water content greater than 10 percent.

(c) [61.342(a)(3)]
Benzene in wastes generated by remediation activities conducted at the facility, such as the excavation of contaminated soil, pumping and treatment of groundwater, and the recovery of product from soil or groundwater, are not included in the calculation of total annual benzene quantity for that facility. If the facility's total annual benzene quantity is 10 Mg/yr (11 ton/yr) or more, wastes generated by remediation activities are subject to the requirements of paragraphs 40 CFR 61.342(c) through (h) of Subpart FF [See section A.II.]. If the facility is managing remediation waste generated offsite, the benzene in this waste shall be included in the calculation of total annual benzene quantity in facility waste, if the waste streams have an annual average water content greater than 10 percent, or if they are mixed with water or other wastes at any time and the mixture has an annual average water content greater than 10 percent.

(d) [61.342(a)(4)]
The total annual benzene quantity is determined based upon the quantity of benzene in the waste before any waste treatment occurs to remove the benzene except as specified in 40 CFR 61.355(c)(1)(i)(A) through (C) [See section A.V.].

ii. [61.342(c)]

Each permittee of a facility at which the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr (11 ton/yr) as determined in 61.347(a) shall manage and treat the facility waste as follows:

(a) [61.342(c)(1)]
For each waste stream that contains benzene, including (but not limited to) organic waste streams that contain less than 10 percent water and aqueous waste streams, even if the wastes are not discharged to an individual drain system, the permittee shall:

(i) [61.342(c)(1)(i)]
Remove or destroy the benzene contained in the waste using a treatment process or wastewater treatment system that complies with the standards specified in 61.348 [See section A.II.].

(ii) [61.342(c)(1)(ii)]
Comply with the standards specified in 40 CFR 61.343 through 61.347 [See section A.II.] for each waste management unit that receives or manages the waste stream prior to and during treatment of the waste stream in accordance with 40 CFR 61.342(c)(1)(i).

(iii) [61.342(c)(1)(iii)]
Each waste management unit used to manage or treat waste streams that will be recycled to a process shall comply with the standards specified in 40 CFR 61.343 through 61.347 [See section A.II.]. Once the waste stream is recycled to a process, including to a tank used for the storage of production process feed, product, or product intermediates, unless this tank is used primarily for the storage of wastes, the material is no longer subject to 40 CFR 61.342(c).

(b) [61.342(c)(2)]
A waste stream is exempt from 40 CFR 61.342(c)(1) provided that the permittee demonstrates initially and, thereafter, at least once per year that the flow-weighted annual average benzene concentration for the waste stream is less than 10 ppmw as determined by the procedures specified in 40 CFR 61.355(c)(2) or 61.355(c)(3) [See section A.V.].

(c) [61.342(c)(3)]
A waste stream is exempt from 40 CFR 61.342(c)(1) provided that the permittee demonstrates initially and, thereafter, at least once per year that the conditions specified in either 40 CFR 61.342(c)(3)(i) or (c)(3)(ii) are met.

(i) [61.342(c)(3)(i)]

The waste stream is process wastewater that has a flow rate less than 0.02 liters per minute (0.005 gallons per minute) or an annual wastewater quantity of less than 10 Mg/yr (11 ton/yr); or

(ii) [61.342(c)(3)(ii)]
All of the following conditions are met:

(aa) [61.342(c)(3)(i)(A)]
The permittee does not choose to exempt process wastewater under 61.342(c)(3)(i);

(bb) [61.342(c)(3)(i)(B)]
The total annual benzene quantity in all waste streams chosen for exemption in 40 CFR 61.342(c)(3)(ii) does not exceed 2.0 Mg/yr (2.2 ton/yr) as determined in the procedures in 40 CFR 61.355(j) [See section A.V.]; and

(cc) [61.342(c)(3)(i)(C)]
The total annual benzene quantity in a waste stream chosen for exemption, including process unit turnaround waste, is determined for the year in which the waste is generated.

iii. [61.342(d)]
As an alternative to the requirements specified in paragraphs (c) and (e) of 40 CFR 61.342, the permittee of a facility at which the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr (11 ton/yr) as determined in paragraph (a) of 40 CFR 61.342 may elect to manage and treat the facility waste as follows:

(a) [61.342(d)(1)]
The permittee shall manage and treat facility waste other than process wastewater in accordance with the requirements of paragraph (c)(1) of 40 CFR 61.342.

(b) [61.342(d)(2)]
The permittee shall manage and treat process wastewater in accordance with the following requirements:

(i) [61.342(d)(2)(i)]
Process wastewater shall be treated to achieve a total annual benzene quantity from facility process wastewater less than 1 Mg/yr (1.1 ton/yr). Total annual benzene from facility process wastewater shall be determined by adding together the annual benzene quantity at the point of waste generation for each untreated process wastewater stream plus the annual benzene

quantity exiting the treatment process for each process wastewater stream treated in accordance with the requirements of paragraph (c)(1)(i) of 40 CFR 61.342.

(ii) [61.342(d)(2)(ii)]
Each treated process wastewater stream identified in paragraph (d)(2)(i) of 40 CFR 61.342 shall be managed and treated in accordance with paragraph (c)(1) of 40 CFR 61.342.

(iii) [61.342(d)(2)(iii)]
Each untreated process wastewater stream identified in paragraph (d)(2)(i) of 40 CFR 61.342 is exempt from the requirements of paragraph (c)(1) of 40 CFR 61.342.

iv. [61.342(e)]
As an alternative to the requirements specified in paragraphs (c) and (d) of 40 CFR 61.342, the permittee of a facility at which the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr (11 ton/yr) as determined in paragraph (a) of 40 CFR 61.342 may elect to manage and treat the facility waste as follows:

(a) [61.342(e)(1)]
The permittee shall manage and treat facility waste with a flow-weighted annual average water content of less than 10 percent in accordance with the requirements of paragraph (c)(1) of 40 CFR 61.342; and

(b) [61.342(e)(2)]
The permittee shall manage and treat facility waste (including remediation and process unit turnaround waste) with a flow-weighted annual average water content of 10 percent or greater, on a volume basis as total water, and each waste stream that is mixed with water or wastes at any time such that the resulting mixture has an annual water content greater than 10 percent, in accordance with the following:

(i) [61.342(e)(2)(i)]
The benzene quantity for the wastes described in paragraph (e)(2) of 40 CFR 61.342 must be equal to or less than 6.0 Mg/yr (6.6 ton/yr), as determined in 40 CFR 61.355(k) [See section A.V]. Wastes as described in paragraph (e)(2) of 40 CFR 61.342 that are transferred offsite shall be included in the determination of benzene quantity as provided in 40 CFR 61.355(k). The provisions of paragraph (f) of 40 CFR 61.342 shall not apply to any permittee who elects to comply with the provisions of paragraph (e) of 40 CFR 61.342.

(ii) [61.342(e)(2)(ii)]

The determination of benzene quantity for each waste stream defined in paragraph (e)(2) of 40 CFR 61.342 shall be made in accordance with 40 CFR 61.355(k) [See section A.V].

v. [61.342(f)]
Rather than treating the waste onsite, the permittee may elect to comply with paragraph (c)(1)(i) of 40 CFR 61.342 by transferring the waste offsite to another facility where the waste is treated in accordance with the requirements of paragraph (c)(1)(i) of 40 CFR 61.342. The permittee transferring the waste shall:

(a) [61.342(f)(1)]
Comply with the standards specified in 40 CFR 61.343 through 61.347 of 40 CFR Part 61 for each waste management unit that receives or manages the waste prior to shipment of the waste offsite.

(b) [61.342(f)(2)]
Include with each offsite waste shipment a notice stating that the waste contains benzene which is required to be managed and treated in accordance with the provisions of 40 CFR Part 61, Subpart FF.

vi. [61.342(g)]
Compliance with 40 CFR Part 61, Subpart FF will be determined by review of facility records and results from tests and inspections using methods and procedures specified in 40 CFR 61.355 [See section A.V].

vii. [61.342(h)]
Permission to use an alternative means of compliance to meet the requirements of 40 CFR 61.342 through 61.352 may be granted by the Administrator of USEPA as provided in 40 CFR 61.353.

c. [61.343] STANDARDS: TANKS

i. [61.343(a)]
Except as provided in 40 CFR 61.343(b) and in 40 CFR 61.351 [See section A.II.], the permittee must meet the standards in paragraph (a)(1) and (a)(2) of 40 CFR 61.343 for each tank in which the waste stream is placed in accordance with 40 CFR 61.342(c)(1)(ii) [See section A.II.]. The standards in this section apply to the treatment and storage of the waste stream in a tank, including dewatering.

(a) [61.343(a)(1)]
The permittee shall install, operate, and maintain a fixed-roof and closed-vent system that routes all organic vapors vented from the tank to a control device.

(i) [61.343(a)(1)(i)]

The fixed-roof shall meet the following requirements:

(aa) [61.343(a)(1)(i)(A)
The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) shall be designed to operate with no detectable emissions as indicated by an instrument reading less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h) [See section A.V.].

(bb) [61.343(a)(1)(i)(B)]
Each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that waste is in the tank except when it is necessary to use the opening for waste sampling or removal, or for equipment inspection, maintenance, or repair.

(cc) [61.343(a)(1)(i)(C)]
If the cover and closed-vent system operate such that the tank is maintained at a pressure less than atmospheric pressure, then paragraph (a)(1)(i)(B) of 40 CFR 61.343 does not apply to any opening that meets all of the following conditions:

(aaa) [61.354(a)(1)(i)(C)(1)]
The purpose of the opening is to provide dilution air to reduce the explosion hazard;

(bbb) [61.354(a)(1)(i)(C)(2)]
The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h) [See section A.V.]; and

(ccc) [61.354(a)(1)(i)(C)(3)]
The pressure is monitored continuously to ensure that the pressure in the tank remains below atmospheric pressure.

(ii) [61.343(a)(1)(ii)]

The closed-vent system and control device shall be designed and operated in accordance with the requirement of 40 CFR 61.349 [See section A.III.].

(b) [61.343(a)(2)]
The permittee must install, operate and maintain an enclosure and closed-vent system that routes all organic vapors vented from the tank, located inside the enclosure, to an enclosed combustion control device in accordance with the requirements specified in 40 CFR 61.343(e).

ii. [61.343(b)]
For a tank that meets all the conditions specified in 40 CFR 61.343(b)(1), the permittee may elect to comply with 40 CFR 61.343(b)(2) as an alternative to the requirements specified in 40 CFR 61.343(a)(1).

(a) [61.343(b)(1)]
The waste managed in the tank complying with 40 CFR 61.343(b)(2) shall meet all of the following conditions:

(i) [61.343(b)(1)(i)]
Each waste stream managed in the tank must have a flow-weighted annual average water content less than or equal to 10 percent water, on a volume basis as total water.

(ii) [61.343(b)(1)(ii)]
The waste managed in the tank either has a maximum organic vapor pressure less than 5.2 kilopascals (kPa) (0.75 pounds per square inch (psi)); has a maximum organic vapor pressure less than 27.6 kPa (4.0 psi) and is managed in a tank having design capacity less than 151 $m^3$ (40,000 gal); or has a maximum organic vapor pressure less than 76.6 kPa (11.1 psi) and is managed in a tank having a design capacity less than 75 $m^3$ (20,000 gal).

(b) [61.343(b)(2)]
The permittee shall install, operate, and maintain a fixed roof as specified in 40 CFR 61.343(a)(1)(i).

(c) [61.343(b)(3)]
For each tank complying with 40 CFR 61.343(b), one or more devices which vent directly to the atmosphere may be used on the tank provided each device remains in a closed, sealed position during normal operations except when the device needs to open to prevent physical damage or permanent deformation of the tank or cover resulting from filling or emptying the tank, diurnal temperature changes, atmospheric pressure changes or malfunction of the unit in

accordance with good engineering and safety practices for handling flammable, explosive, or other hazardous materials.

iii. [61.343(e)]
If the permittee controls air pollutant emissions by using an enclosure vented through a closed-vent system to an enclosed combustion control device, then the permittee must meet the requirements specified in paragraphs (e)(1) through (4) of 40 CFR 61.343(e).

(a) [61.343(e)(1)]
The tank must be located inside a total enclosure. The enclosure must be designed and operated in accordance with the criteria for a permanent total enclosure as specified in "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure" in 40 CFR 52.741, appendix B. The enclosure may have permanent or temporary openings to allow worker access; passage of material into or out of the enclosure by conveyor, vehicles, or other mechanical means; entry of permanent mechanical or electrical equipment; or direct airflow into the enclosure. The permittee must perform the verification procedure for the enclosure as specified in section 5.0 of Procedure T initially when the enclosure is first installed and, thereafter, annually.
A facility that has conducted an initial compliance demonstration and that performs annual compliance demonstrations in accordance with the requirements for Tank Level 2 control requirements 40 CFR 264.1084(i) or 40 CFR 265(i)is not required to make repeat demonstrations of initial and continuous compliance for the purposes of 40 CFR Part 61, Subpart FF.

(b) [61.343(e)(2)]
The enclosure must be vented through a closed-vent system to an enclosed combustion control device that is designed and operated in accordance with the standards for either a vapor incinerator, boiler, or process heater specified in 40 CFR 61.349.

(c) [61.343(e)(3)]
Safety devices, as defined in 40 CFR Part 61, Subpart FF, may be installed and operated as necessary on any enclosure, closed-vent system, or control device used to comply with the requirements of paragraphs (e)(1) and (2) of 40 CFR 61.343.

(d) [61.343(e)(4)]
The closed-vent system must be designed and operated in accordance with the requirements of 40 CFR 61.349.

d. [61.344] STANDARDS: SURFACE IMPOUNDMENTS

i. [61.344(a)]

The permittee shall meet the following standards for each surface impoundment in which waste is placed in accordance with 40 CFR 61.342(c)(1)(ii) [See section A.II]:

(a) [61.344(a)(1)]
The permittee shall install, operate, and maintain on each surface impoundment a cover (e.g., air-supported structure or rigid cover) and closed-vent system that routes all organic vapors vented from the surface impoundment to a control device.

(i) [61.344(a)(1)(i)]
The cover shall meet the following requirements:

(aa) [61.344(a)(1)(i)(A)]
The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h)[See section A.V].

(bb) [61.344(a)(1)(i)(B)]
Each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that waste is in the surface impoundment except when it is necessary to use the opening for waste sampling or removal, or for equipment inspection, maintenance, or repair.

(cc) [61.344(a)(1)(i)(C)]
If the cover and closed-vent system operate such that the enclosure of the surface impoundment is maintained at a pressure less than atmospheric pressure, then paragraph (a)(1)(i)(B) of 40 CFR 61.344 does not apply to any opening that meets all of the following conditions:

(aaa) [61.344(a)(1)(i)(C)(1)]
The purpose of the opening is to provide dilution air to reduce the explosion hazard;

(bbb) [61.344(a)(1)(i)(C)(2)]
The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and

thereafter at least once per year by the methods specified in 40 CFR 61.355(h)[See section A.V]; and

(ccc) [61.344(a)(1)(i)(C)(3)]
The pressure is monitored continuously to ensure that the pressure in the enclosure of the surface impoundment remains below atmospheric pressure.

(dd) [61.344(a)(1)(i)(D)]
The cover shall be used at all times that waste is placed in the surface impoundment except during removal of treatment residuals in accordance with 40 CFR 268.4 or closure of the surface impoundment in accordance with 40 CFR 264.228. (Note: the treatment residuals generated by these activities may be subject to the requirements of 40 CFR Part 61, Subpart FF.)

(ii) [61.344(a)(1)(ii)]
The closed-vent system and control device shall be designed and operated in accordance with 40 CFR 61.349 [See section A.III].

e. [61.345(a)] STANDARDS: CONTAINERS
The permittee shall meet the following standards for each container in which waste is placed in accordance with 40 CFR 61.342(c)(1)(ii) [See section A.II.]:

i. [61.345(a)(1)]
The permittee shall install, operate, and maintain a cover on each container used to handle, transfer, or store waste in accordance with the following requirements:

(a) [61.345(a)(1)(i)]
The cover and all openings (e.g., bungs, hatches, and sampling ports) shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h) [See section A.V.].

(b) [61.345(a)(1)(ii)]
Except as provided in 40 CFR 61.345(a)(4), each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that waste is in the container except when it is necessary to use the opening for waste loading, removal, inspection, or sampling.

ii. [61.345(a)(2)]
When a waste is transferred into a container by pumping, the permittee shall perform the transfer using a submerged fill pipe. The submerged fill pipe outlet shall extend to within two fill pipe diameters of the bottom of the container while the container is being loaded. During loading of the waste, the cover shall remain in place and all openings shall be maintained in a closed, sealed position except for those openings required for the submerged fill pipe, those openings required for venting of the container to prevent physical damage or permanent deformation of the container or cover, and any openings complying with 40 CFR 61.345(a)(4).

iii. [61.345(a)(3)]
Treatment of a waste in a container, including aeration, thermal or other treatment, shall be performed by the permittee in a manner such that while the waste is being treated the container meets the standards specified in paragraphs(a)(3)(i) through (iii) of 40 CFR 61.345, except for covers and closed-vent systems that meet the requirements in 40 CFR 61.345(a)(4).

(a) [61.345(a)(3)(i)]
The permittee must either:

(i) [61.345(a)(3)(i)(A)]
Vent the container inside a total enclosure which is exhausted through a closed-vent system to a control device in accordance with the requirements of paragraphs (a)(3)(ii)(A) and (B) of 40 CFR 61.345 [See section A.II]; or

(ii) [61.345(a)(3)(i)(B)]
Vent the covered or closed container directly through a closed-vent system to a control device in accordance with the requirements of paragraphs (a)(3)(ii)(B) and (C) of 40 CFR 61.345 [See section A.II].

(b) [61.345(a)(3)(ii)]
The permittee must meet the following requirements, as applicable to the type of air emission control equipment selected by the permittee:

(i) [61.345(a)(3)(ii)(A)]
The total enclosure must be designed and operated in accordance with the criteria for a permanent total enclosure as specified in section 5 of the "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure" in 40 CFR 52.741, appendix B. The enclosure may have permanent or temporary openings to allow worker access; passage of containers through the enclosure by conveyor or other mechanical means; entry of permanent mechanical or electrical equipment; or direct airflow into the enclosure. The

permittee must perform the verification procedure for the enclosure as specified in section 5.0 of "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure" initially when the enclosure is first installed and, thereafter, annually. A facility that has conducted an initial compliance demonstration and that performs annual compliance demonstrations in accordance with the Container Level 3 control requirements in 40 CFR 264.1086(e)(2)(i) or 40 CFR 265.1086(e)(2)(i) is not required to make repeat demonstrations of initial and continuous compliance for the purposes of 40 CFR Part 61, Subpart FF.

(ii) [61.345(a)(3)(ii)(B)]
The closed-vent system and control device must be designed and operated in accordance with the requirements of 40 CFR 61.349 [See section A.II].

(iii) [61.345(a)(3)(ii)(C)]
For a container cover, the cover and all openings (e.g., doors, hatches) must be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h) [See section A.V].

(c) [61.345(a)(3)(iii)]
Safety devices, as defined in 40 CFR Part 61, Subpart FF, may be installed and operated as necessary on any container, enclosure, closed-vent system, or control device used to comply with the requirements of 40 CFR 61.345(e)(1) [See section A.II].

iv. [61.345(a)(4)]
If the cover and closed-vent system operate such that the container is maintained at a pressure less than atmospheric pressure, the permittee may operate the system with an opening that is not sealed and kept closed at all times if the following conditions are met:

(a) [61.345(a)(4)(i)]
The purpose of the opening is to provide dilution air to reduce the explosion hazard;

(b) [61.345(a)(4)(ii)]
The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by methods specified in 40 CFR 61.355(h) [See section A.V.]; and

(c) [61.345(a)(4)(iii)]
The pressure is monitored continuously to ensure that the pressure in the container remains below atmospheric pressure.

f. [61.346] STANDARDS: INDIVIDUAL DRAIN SYSTEMS - 40 CFR Part 61, Subpart FF

i. [61.346(a)]
Except as provided in 40 CFR 61.346(b), the permittee shall meet the following standards for each individual drain system in which waste is placed in accordance with 40 CFR 61.342(c)(1)(ii) [See section A.II.]:

(a) [61.346(a)(1)]
The permittee shall install, operate, and maintain on each drain system opening a cover and closed-vent system that routes all organic vapors vented from the drain system to a control device.

(i) [61.346(a)(1)(i) and (a)(1)(i)(A) through (a)(1)(i)(C)]
The cover shall meet the following requirements:

(aa) The cover and all openings (e.g., access hatches, sampling ports) shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h) [See section A.V.].

(bb) Each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that waste is in the drain system except when it is necessary to use the opening for waste sampling or removal, or for equipment inspection, maintenance, or repair.

(cc) If the cover and closed-vent system operate such that the individual drain system is maintained at a pressure less than atmospheric pressure, then 40 CFR 61.346(a)(1)(i)(B) does not apply to any opening that meets all of the following conditions:

(aaa) The purpose of the opening is to provide dilution air to reduce the explosion hazard;

(bbb) The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and

thereafter at least once per year by the methods specified in 61.355(h) [See section A.V.]; and

(ccc) The pressure is monitored continuously to ensure that the pressure in the individual drain system remains below atmospheric pressure.

(ii) [61.346(a)(1)(ii)]
The closed-vent system and control device shall be designed and operated in accordance with 40 CFR 61.349 [See section A.III.].

ii. [61.346(b)]
As an alternative to complying with 40 CFR 61.346(a), the permittee may elect to comply with the following requirements:

(a) [61.346(b)(1)]
Each drain shall be equipped with water seal controls or a tightly sealed cap or plug.

(b) [61.346(b)(2)]
Each junction box shall be equipped with a cover and may have a vent pipe. The vent pipe shall be at least 90 cm (3 ft) in length and shall not exceed 10.2 cm (4 in) in diameter.

(i) [61.346(b)(2)(i)]
Junction box covers shall have a tight seal around the edge and shall be kept in place at all times, except during inspection and maintenance.

(ii) [61.346(b)(2)(ii)]
One of the following methods shall be used to control emissions from the junction box vent pipe to the atmosphere:

(aa) [61.346(b)(2)(ii)(A)]
Equip the junction box with a system to prevent the flow of organic vapors from the junction box vent pipe to the atmosphere during normal operation. An example of such a system includes use of water seal controls on the junction box. A flow indicator shall be installed, operated, and maintained on each junction box vent pipe to ensure that organic vapors are not vented from the junction box to the atmosphere during normal operation.

(bb) [61.346(b)(2)(ii)(B)]

Connect the junction box vent pipe to a closed-vent system and control device in accordance with 40 CFR 61.349.

(c) [CFR 61.346(b)(3)]
Each sewer line shall not be open to the atmosphere and shall be covered or enclosed in a manner so as to have no visual gaps or cracks in joints, seals, or other emission interfaces.

g. [61.347(a)] STANDARDS: OIL-WATER SEPARATORS - 40 CFR Part 61, Subpart FF
Except as provided in 40 CFR 61.352, the permittee shall meet the following standards for each oil-water separator in which waste is placed in accordance with 40 CFR 61.342(c)(1)(ii):

i. [61.347(a)(1)]
The permittee shall install, operate, and maintain a fixed-roof and closed-vent system that routes all organic vapors vented from the oil-water separator to a control device.

(a) [61.347(a)(1)(i)]
The fixed-roof shall meet the following requirements:

(i) [61.347(a)(1)(i)(A)]
The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h).

(ii) [61.347(a)(1)(i)(B)]
Each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that waste is in the oil-water separator except when it is necessary to use the opening for waste sampling or removal, or for equipment inspection, maintenance, or repair.

(iii) [61.347(a)(1)(i)(C)]
If the cover and closed-vent system operate such that the oil-water separator is maintained at a pressure less than atmospheric pressure, then paragraph (a)(1)(i)(B) of 40 CFR 61.347 does not apply to any opening that meets all of the following conditions:

(aa) [61.347(a)(1)(i)(C)(1)]

The purpose of the opening is to provide dilution air to reduce the explosion hazard;

(bb) [61.347(a)(1)(i)(C)(2)]
The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h); and

(cc) [61.347(a)(1)(i)(C)(3)]
The pressure is monitored continuously to ensure that the pressure in the oil-water separator remains below atmospheric pressure.

(b) [61.347(a)(1)(ii)]
The closed-vent system and control device shall be designed and operated in accordance with the requirements of 40 CFR 61.349.

h. [61.348] STANDARDS: TREATMENT PROCESSES - 40 CFR Part 61, Subpart FF

i. [61.348(a)]
Except as provided in paragraph 40 CFR 61.348(a)(5), the permittee shall treat the waste stream in accordance with the following requirements:

(a) [61.348(a)(1)]
The permittee shall design, install, operate, and maintain a treatment process that either:

(i) [61.348(a)(1)(i)]
Removes benzene from the waste stream to a level less than 10 parts per million by weight (ppmw) on a flow-weighted annual average basis,

(ii) [61.348(a)(1)(ii)]
Removes benzene from the waste stream by 99 percent or more on a mass basis, or

(iii) [61.348(a)(1)(iii)]
Destroys benzene in the waste stream by incinerating the waste in a combustion unit that achieves a destruction efficiency of 99 percent or greater for benzene.

(b) [61.348(a)(2)]
Each treatment process complying with 40 CFR 61.348(a)(1)(i) or (ii) shall be designed and operated in accordance with the appropriate waste management unit standards specified in 40 CFR 61.343 through

61.347 [see sections A.II. and A.III.]. For example, if a treatment process is a tank, then the permittee shall comply with 40 CFR 61.343 [see sections A.II. and A.III.].

(c) [61.348(a)(3)]
For the purpose of complying with the requirements specified in paragraph a.i. of 40 CFR 61.348, the intentional or unintentional reduction in the benzene concentration of a waste stream by dilution of the waste stream with other wastes or materials is not allowed.

(d) [61.348(a)(4)]
The permittee may aggregate or mix together individual waste streams to create a combined waste stream for the purpose of facilitating treatment of waste to comply with the requirements of paragraph (a)(1) of 40 CFR 61.348 except as provided by 40 CFR 61.348(a)(5).

(e) [61.348(a)(5)]
If the permittee aggregates or mixes any combination of process wastewater, product tank drawdown, or landfill leachate subject to 40 CFR 61.342(c)(1) [See section A.II.] together with other waste streams to create a combined waste stream for the purpose of facilitating management or treatment of waste in a wastewater treatment system, then the wastewater treatment system shall be operated in accordance with 40 CFR 61.348(b). These provisions apply to above-ground wastewater treatment systems as well as those that are at or below ground level.

ii. [61.348(b)]
Except for facilities complying with 40 CFR 61.342(e) the permittee that aggregates or mixes individual waste streams as defined in 61.348(a)(5) for management and treatment in a wastewater treatment system shall comply with the following requirements:

(a) [61.348(b)(1)]
The permittee shall design and operate each waste management unit that comprises the wastewater treatment system in accordance with the appropriate standards specified in 40 CFR 61.343 through 61.347 [see sections A.II. and A.III.].

(b) [61.348(b)(2)]
The provisions of 40 CFR 61.348(b)(1) do not apply to any waste management unit that the permittee demonstrates to meet the following conditions initially and, thereafter, at least once per year:

(i) [61.348(b)(2)(i)]
The benzene content of each waste stream entering the waste management unit is less than 10 ppmw on a flow-weighted

annual average basis as determined by the procedures specified in 40 CFR 61.355(c) [See section A.V.]; and

(ii) [61.348(b)(2)(ii) and (b)(2)(ii)(A) and (b)(2)(ii)(B)]
The total annual benzene quantity contained in all waste streams managed or treated in exempt waste management units comprising the facility wastewater treatment systems is less than 1 Mg/yr (1.1 ton/yr). For this determination, total annual benzene quantity shall be calculated as follows:

(aa) The total annual benzene quantity shall be calculated as the sum of the individual benzene quantities determined at each location where a waste stream first enters an exempt waste management unit. The benzene quantity discharged from an exempt waste management unit shall not be included in this calculation.

(bb) The annual benzene quantity in a waste stream managed or treated in an enhanced biodegradation unit shall not be included in the calculation of the total annual benzene quantity, if the enhanced biodegradation unit is the first exempt unit in which the waste is managed or treated. A unit shall be considered enhanced biodegradation if it is a suspended-growth process that generates biomass, uses recycled biomass, and periodically removes biomass from the process. An enhanced biodegradation unit typically operates at a food-to-microorganism ratio in the range of 0.05 to 1.0 kg of biological oxygen demand per kg of biomass per day, a mixed liquor suspended solids ratio in the range of 1 to 8 grams per liter, and a residence time in the range of 3 to 36 hours.

iii. [61.348(c)]
The permittee shall demonstrate that each treatment process or wastewater treatment system unit, except as provided in 40 CFR 61.348(d), achieves the appropriate conditions specified in 40 CFR 61.348(a) or (b) in accordance with the following requirements:

(a) [61.348(c)(1)]
Engineering calculations in accordance with requirements specified in 40 CFR 61.356(e) [See section A.III.]; or

(b) [61.348(c)(2)]
Performance tests conducted using the test methods and procedures that meet the requirements specified in 40 CFR 61.355 [See section A.V.].

iv. [61.348(d)]
A treatment process or waste stream is in compliance with the requirements of 40 CFR Part 61, Subpart FF and exempt from the requirements of paragraph (c) of 40 CFR 61.348 provided that the permittee documents that the treatment process or waste stream is in compliance with other regulatory requirements as follows:

(a) [61.348(d)(1)]
The treatment process is a hazardous waste incinerator for which the permittee has been issued a final permit under 40 CFR Part 270 and complies with the requirements of 40 CFR Part 264, Subpart O;

(b) [61.348(d)(2)]
The treatment process is an industrial furnace or boiler burning hazardous waste for energy recovery for which the permittee has been issued a final permit under 40 CFR Part 270 and complies with the requirements of 40 CFR part 266, subpart D;

(c) [61.348(d)(3)]
The waste stream is treated by a means or to a level that meets benzene-specific treatment standards in accordance with the Land Disposal Restrictions under 40 CFR part 268, and the treatment process is designed and operated with a closed-vent system and control device meeting the requirements of 40 CFR 61.349;

(d) [61.348(d)(4)]
The waste stream is treated by a means or to a level that meets benzene-specific effluent limitations or performance standards in accordance with the Effluent Guidelines and Standards under 40 CFR parts 401-464, and the treatment process is designed and operated with a closed-vent system and control device meeting the requirements of 40 CFR 61.349; or

(e) [61.348(d)(5)]
The waste stream is discharged to an underground injection well for which the permittee has been issued a final permit under 40 CFR Part 270 and complies with the requirements of 40 CFR part 122.

v. [61.348(e)]
Except as specified in 40 CFR 61.348(e)(3), if the treatment process or wastewater treatment system unit has any openings (e.g., access doors, hatches, etc.), all such openings shall be sealed (e.g., gasketed, latched, etc.) and kept closed at all times when waste is being treated, except during inspection and maintenance.

(a) [61.348(e)(3)]

If the cover and closed-vent system operate such that the treatment process and wastewater treatment system unit are maintained at a pressure less than atmospheric pressure, the permittee may operate the system with an opening that is not sealed and kept closed at all times if the following conditions are met:

(i) [61.348(e)(3)(i)]
The purpose of the opening is to provide dilution air to reduce the explosion hazard;

(ii) [61.348(e)(3)(ii)]
The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h) [See section A.V.]; and

(iii) [61.348(e)(3)(iii)]
The pressure is monitored continuously to ensure that the pressure in the treatment process and wastewater treatment system unit remain below atmospheric pressure.

vi. [61.348(f)]
Except for treatment processes complying with 40 CFR 61.348(d), the Administrator may request at any time a permittee demonstrate that a treatment process or wastewater treatment system unit meets the applicable requirements specified in 40 CFR 61.348(a) or 61.348(b) by conducting a performance test using the test methods and procedures as required in 40 CFR 61.355(h) [See section A.V.].

i. [61.349] STANDARDS: CLOSED VENT SYSTEMS AND CONTROL DEVICES - 40 CFR Part 61, Subpart FF

i. [61.349(a)]
For each closed-vent system and control device used to comply with standards in accordance with 40 CFR 61.343 through 61.348 [see sections A.II. and A.III.], the permittee shall properly design, install, operate, and maintain the closed-vent system and control device in accordance with the following requirements:

(a) [61.349(a)(1)]
The closed-vent system shall:

(i) [61.349(a)(1)(i)]
Be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at

least once per year by the methods specified in 40 CFR 61.355(h) [See section A.V.].

(ii) [61.349(a)(1)(ii); (a)(1)(ii)(A) and (a)(1)(ii)(B)]
Vent systems that contain any bypass line that could divert the vent stream away from a control device used to comply with the provisions of 40 CFR Part 61, Subpart FF shall install, maintain, and operate according to the manufacturer's specifications a flow indicator that provides a record of vent stream flow away from the control device at least once every 15 minutes, except as provided in paragraph (a)(1)(ii)(B) of 40 CFR 61.349.

(aa) The flow indicator shall be installed at the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere.

(bb) Where the bypass line valve is secured in the closed position with a car-seal or a lock-and-key type configuration, a flow indicator is not required.

(iii) [61.349(a)(1)(iii)]
All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

(iv) [61.349(a)(1)(iv)]
For each closed-vent system complying with 40 CFR 61.349(a), one or more devices which vent directly to the atmosphere may be used on the closed-vent system provided each device remains in a closed, sealed position during normal operations except when the device needs to open to prevent physical damage or permanent deformation of the closed-vent system resulting from malfunction of the unit in accordance with good engineering and safety practices for handling flammable, explosive, or other hazardous materials.

(b) [61.349(a)(2)]
The control device shall be designed and operated in accordance with the following conditions:

(i) [61.349(a)(2)(i)]
An enclosed combustion device (e.g., a vapor incinerator, boiler, or process heater) shall meet one of the following conditions:

(aa) Reduce the organic emissions vented to it by 95 weight percent or greater;

(bb) Achieve a total organic compound concentration of 20 ppmv (as the sum of the concentrations for individual compounds using Method 18) on a dry basis corrected to 3 percent oxygen; or

(cc) Provide a minimum residence time of 0.5 seconds at a minimum temperature of 760°C (1,400 °F). If a boiler or process heater issued as the control device, then the vent stream shall be introduced into the flame zone of the boiler or process heater.

(ii) [61.349(a)(2)(ii)]
A vapor recovery system (e.g., a carbon adsorption system or a condenser) shall recover or control the organic emissions vented to it with an efficiency of 95 weight percent or greater, or shall recover or control the benzene emissions vented to it with an efficiency of 98 weight percent or greater.

(iii) [61.349(a)(2)(iii)]
A flare shall comply with the requirements of 40 CFR 60.18.

(iv) [61.349(a)(2)(iv)]
A control device other than those described in paragraphs (a)(2)(i) through (iii) of 40 CFR 61.349 may be used provided that the following conditions are met:

(aa) [61.349(a)(2)(iv)(A)]
The device shall recover or control the organic emissions vented to it with an efficiency of 95 weight percent or greater, or shall recover or control the benzene emissions vented to it with an efficiency of 98 weight percent or greater.

(bb) [61.349(a)(2)(iv)(B)]
The permittee shall develop test data and design information that documents the control device will achieve an emission control efficiency of either 95 percent or greater for organic compounds or 98 percent or greater for benzene.

(cc) [61.349(a)(2)(iv)(C)]
The permittee shall identify:

(aaa) [61.349(a)(2)(iv)(C)(1)]
The critical operating parameters that affect the emission control performance of the device;

(bbb) [61.349(a)(2)(iv)(C)(2)]
The range of values of these operating parameters that ensure the emission control efficiency specified in paragraph (a)(2)(iv)(A) of 40 CFR 61.349 is maintained during operation of the device; and

(ccc) [61.349(a)(2)(iv)(C)(3)]
How these operating parameters will be monitored to ensure the proper operation and maintenance of the device.

(dd) [61.349(a)(2)(iv)(D)]
The permittee shall submit the information and data specified in 61.349(a)(2)(iv)(B) and (C) to the Administrator of U.S. EPA prior to operation of the alternative control device.

(ee) [61.349(a)(2)(iv)(E)]
The Administrator of U.S. EPA will determine, based on the information submitted under paragraph (a)(2)(iv)(D) of 40 CFR 61.349, if the control device subject to paragraph (a)(2)(iv) of 40 CFR 61.349 meets the requirements of 40 CFR 61.349. The control device subject to paragraph (a)(2)(iv) of 40 CFR 61.349 may be operated prior to receiving approval from the Administrator of USEPA. However, if the Administrator of USEPA determines that the control device does not meet the requirements of 40 CFR 61.349, the facility may be subject to enforcement action beginning from the time the control device began operation.

ii. [61.349(b)]
Each closed-vent system and control device used to comply with 40 CFR Part 61, Subpart FF shall be operated at all times when waste is placed in the waste management unit vented to the control device except when maintenance or repair of the waste management unit cannot be completed without a shutdown of the control device.

iii. [61.349(c)]
The permittee shall demonstrate that each control device, except for a flare, achieves the appropriate conditions specified in 40 CFR 61.349(a)(2) by using one of the following methods:

(a) [61.349(c)(1)]

Engineering calculations in accordance with requirements specified in 40 CFR 61.356(f) [See section A.III.]; or

(b) [61.349(c)(2)]
Performance tests conducted using the test methods and procedures that meet the requirements specified in 40 CFR 61.355 [See section A.V.].

iv. [61.349(d)]
The permittee shall demonstrate compliance of each flare in accordance with 61.349(a)(2)(iii).

v. [61.349(e)]
The Administrator may request at any time a permittee demonstrate that a control device meets the applicable conditions specified in 40 CFR 61.349(a)(2) by conducting a performance test using the test methods and procedures as required in 40 CFR 61.355 [See section A.V.], and for control devices subject to 40 CFR 61.349(a)(2)(iv), the Administrator may specify alternative test methods and procedures, as appropriate

j. [61.351] ALTERNATIVE STANDARDS FOR TANKS - 40 CFR Part 61, Subpart FF

i. [61.351(a)]
As an alternative to the standards for tanks specified in 40 CFR 61.343 [See section A.II.], the permittee may elect to comply with one of the following:

(a) [61.351(a)(1)]
A fixed roof and internal floating roof meeting the requirements in 40 CFR 60.112b(a)(1);

(b) [61.351(a)(2)]
An external floating roof meeting the requirements of 40 CFR 60.112b(a)(2); or

(c) [61.351(a)(3)]
An alternative means of emission limitation as described in 40 CFR 60.114b.

ii. [61.351(b)]
If the permittee elects to comply with the provisions of 40 CFR 61.351, then the permittee is exempt from the provisions of 40 CFR 61.343 [See section A.II.] applicable to the same facilities.

k. [61.352] Alternative standards for oil-water separators

i. [61.352(a)]

As an alternative to the standards for oil-water separators specified in 40 CFR 61.347, the permittee may elect to comply with one of the following:

(a) [63.652(a)(1)]
A floating roof meeting the requirements in 40 CFR 60.693-2(a); or

(b) [63.654(a)(2)]
An alternative means of emission limitation as described in 40 CFR 60.694.

ii. [61.352(b)]
For portions of the oil-water separator where it is infeasible to construct and operate a floating roof, such as over the weir mechanism, a fixed roof vented to a vapor control device that meets the requirements in 40 CFR 61.347 and 61.349 shall be installed and operated.

iii. [61.352(c)]
Except as provided in paragraph (b) of 40 CFR 61.352, if the permittee elects to comply with the provisions of 40 CFR 61.352, then the permittee is exempt from the provisions in 40 CFR 61.347 applicable to the same facilities.

l. [61.353] Alternative means of emission limitation - 40 CFR Part 61, Subpart FF

i. [61.353(a)]
If, in the Administrator of U.S. EPA's judgment, an alternative means of emission limitation will achieve a reduction in benzene emissions at least equivalent to the reduction in benzene emissions from the source achieved by the applicable design, equipment, work practice, or operational requirements in 40 CFR Part 61.342 through 61.349, the Administrator of U.S. EPA will publish in the Federal Register a notice permitting the use of the alternative means for purposes of compliance with that requirement. The notice may condition the permission on requirements related to the operation and maintenance of the alternative means.

ii. [61.353(b)]
Any notice under paragraph (a) of 40 CFR 61.353 shall be published only after public notice and an opportunity for a hearing.

iii. [61.353(c)]
Any person seeking permission under 40 CFR 61.353 shall collect, verify, and submit to the Administrator information showing that the alternative means achieves equivalent emission reductions.

5. [OAC rule 3745-21-09] Control of volatile organic compounds from stationary sources

a. [OAC rule 3745-21-09(T)] STANDARDS FOR PETROLEUM REFINERY EQUIPMENT LEAKS OF VOCs FROM PUMP SEALS, PIPELINE VALVES, PROCESS DRAINS, COMPRESSOR SEALS AND PRESSURE RELIEF DEVICES

i. [OAC rule 3745-21-09(T)(1)(d)]
All pipeline valves in gas service and pressure relief valves in gas service shall be clearly marked and identified in such a manner that they will be obvious to both refinery personnel performing monitoring and to the director.

ii. If a leak is identified as a result of the monitoring program required by OAC rule 3745-21-09(T)(a) and the concentration of volatile organic compounds exceeds ten thousand parts per million by volume, a tag shall immediately be placed on the leaking component. The tag shall be readily visible and weatherproof; it shall bear an identification number; and it shall clearly indicate the date the leak was detected. The tag shall remain in place until the leaking component is repaired.

iii. [OAC rule 3745-21-09(T)(2)]
Any permittee of a petroleum refinery shall repair and retest any leaking component, which is tagged and identified in accordance with OAC rule 3745-21-09(T)(b), as soon as possible but no later than fifteen days after the leak is found unless the leaking component cannot be repaired until a process unit turnaround occurs.

iv. [OAC rule 3745-21-09(T)(3)]
The Toledo Division of Environmental Services may require a process unit turnaround to occur earlier than the normally scheduled date if the number and severity of leaking components awaiting a turnaround warrant such action. Any such process unit turnaround shall be required by means of an order issued by the director to the permittee of the petroleum refinery pursuant to division (R) of section 3704.03 of the Ohio Revised Code.

v. [OAC rule 3745-21-09(T)(4)]
The Toledo Division of Environmental Services may accept an alternative monitoring, record keeping and reporting program for that required by section A.I.2. if the permittee of a petroleum refinery can demonstrate to the satisfaction of the director that the alternative program is at least as effective in identifying, documenting and reporting leaks from petroleum refinery equipment as the program outlined in this permit. For purposes of this paragraph, any proposed alternative program which the director finds comparable to the requirements of paragraph (DD)(12) or (DD)(13) of OAC rule 3745-21-09 shall be acceptable to the director.

b. [OAC rule 3745-21-09(DD)(10)(d)] Flare requirements

i. [OAC rule 3745-21-09(DD)(10)(d)(i)]
Flares shall be designed for and operated with no visible emissions as determined by "Method 22, 40 CFR, Part 60, Appendix A," except for periods not to exceed a total of five minutes during any one hundred twenty consecutive minutes.

ii. [OAC rule 3745-21-09(DD)(10)(d)(ii)]
Flares shall be operated with either an electric arc ignition system or a pilot flame. If a pilot flame is employed, the flame shall be present at all times and shall be monitored with a thermocouple or any other equivalent device to detect the presence of the pilot flame. If an electric arc ignition system is employed, the arcing shall pulse continually and shall be monitored to detect a failure.

iii. [OAC rule 3745-21-09(DD)(10)(d)(iii)]
Flares shall be steam-assisted, air assisted or nonassisted.

iv. [OAC rule 3745-21-09(DD)(10)(d)(iv)]
The net heating value of the gas being combusted in flares, as determined by the method specified in paragraph (P)(2) of OAC rule 3745-21-10, shall be three hundred Btu/scf or greater if the flare is steam assisted, or shall be two hundred BTU/scf or greater if the flare is nonassisted.

v. [OAC rule 3745-21-09(DD)(10)(d)(v)]
Except as provided in OAC rule 3745-21-09(DD)(10)(d)(vi), the flare shall be designed and operated with an actual exit velocity, as determined by the method specified in paragraph(P)(3) of OAC rule 3745-21-10, less than sixty feet per second if the flare is steam-assisted or nonassisted, or less than the maximum permitted velocity, as determined in paragraph (P)(4) of OAC rule 3745-21-10, if the flare is air-assisted.

vi. [OAC rule 3745-21-09(DD)(10)(d)(vi)]
Excluded from the requirements of paragraph OAC rule 3745-21-09(DD)(10)(d)(v) is any steam-assisted or nonassisted flare that meets both of the following requirements:

(a) [OAC rule 3745-21-09(DD)(10)(d)(vi)(a)]
The net heating value of the gas being combusted in the flare, as determined by the method specified in paragraph(P)(2) of OAC rule 3745-21-10,shall be greater than one thousand Btu/scf.

(b) [OAC rule 3745-21-09(DD)(10)(d)(vi)(b)]
The flare shall be designed and operated with an actual exit velocity, as determined by the method specified in paragraph (P)(3) of OAC rule 3745-21-10, less than four hundred feet per second.

## III. Monitoring and/or Record Keeping Requirements

1. 40 CFR Part 63, Subpart CC

a. [63.644] Miscellaneous Process Vent Provisions

i. [63.644(a)]

Except as provided in 40 CFR 63.644(b) [See section A.III.], the permittee of a Group 1 miscellaneous process vent that uses a combustion device to comply with the requirements in 40 CFR 63.643(a) shall install the monitoring equipment specified in 40 CFR 63.644(a)(1), (a)(2), (a)(3), or (a)(4) [See section A.III.], depending on the type of combustion device used. All monitoring equipment shall be installed, calibrated, maintained, and operated according to manufacturer's specifications.

(a) [63.644(a)(1)]
Where an incinerator is used, a temperature monitoring device equipped with a continuous recorder is required.

(i) [63.644(a)(1)(i)]
Where an incinerator other than a catalytic incinerator is used, a temperature monitoring device shall be installed in the firebox or in the ductwork immediately downstream of the firebox in a position before any substantial heat exchange occurs.

(ii) [63.644(a)(1)(ii)]
Where a catalytic incinerator is used, temperature monitoring devices shall be installed in the gas stream immediately before and after the catalyst bed.

(b) [63.644(a)(2)]
Where a flare is used, a device (including but not limited to a thermocouple, an ultraviolet beam sensor, or an infrared sensor) capable of continuously detecting the presence of a pilot flame is required.

(c) [63.644(a)(3)]
Any boiler or process heater with a design heat input capacity greater than or equal to 44 megawatt or any boiler or process heater in which all vent streams are introduced into the flame zone is exempt from monitoring.

(d) [63.644(a)(4)]
Any boiler or process heater less than 44 megawatts design heat capacity where the vent stream is not introduced into the flame zone is required to use a temperature monitoring device in the firebox equipped with a continuous recorder.

ii. [63.644(b)]
The permittee of a Group 1 miscellaneous process vent may request approval to monitor parameters other than those listed in 40 CFR 63.644(a). The request shall be submitted according to the procedures specified in 40 CFR 63.654(h) [See section A.IV.]. Approval shall be requested if the permittee:

(a) [63.644(b)(1)]
Uses a control device other than an incinerator, boiler, process heater, or flare; or

(b) [63.644(b)(2)]
Uses one of the control devices listed in 40 CFR 63.644(a) [See section A.III.], but seeks to monitor a parameter other than those specified in 40 CFR 63.644(a) [See section A.III].

iii. [63.644(c)]
The permittee of a Group 1 miscellaneous process vent using a vent system that contains bypass lines that could divert a vent stream away from the control device used to comply with 40 CFR 63.644(a) [See section A.III.] shall comply with either 40 CFR 63.644(c)(1) or (c)(2) [See section A.III.]. Equipment such as low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, pressure relief valves needed for safety reasons, and equipment subject to 40 CFR 63.648 are not subject to this paragraph.

(a) [63.644(c)(1)]
Install, calibrate, maintain, and operate a flow indicator that determines whether a vent stream flow is present at least once every hour. Records shall be generated as specified in 40 CFR 63.654(h) and (i) [See section A,IV.]. The flow indicator shall be installed at the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere; or

(b) [63.644(c)(2)]
Secure the bypass line valve in the closed position with a car-seal or a lock- and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and the vent stream is not diverted through the bypass line.

iv. [63.644(d)]
The permittee shall establish a range that ensures compliance with the emissions standard for each parameter monitored under 63.644(a) and (b) of 40 CFR 63.644 [See section A.III.]. In order to establish the range, the information required in 40 CFR 63.654(f)(3)) shall be submitted in the Notification of Compliance Status report.

v. [63.644(e)]
Each permittee of a control device subject to the monitoring provisions of 40 CFR 63.644 shall operate the control device in a manner consistent with the minimum and/or maximum operating parameter value or procedure required to be monitored under 40 CFR 63.644(a) and (b) [See section A.III.]. Operation of the control device in a manner that constitutes a period of excess emissions, as defined in 40 CFR 63.654(g)(6) [See section A.IV.], or failure

to perform procedures required by this section shall constitute a violation of the applicable emission standard of Subpart CC.

b. [40 CFR Part 63, Subpart CC, Table 10] Record Keeping Requirements for Miscellaneous Process Vents
The permittee maintain the following records as specified in Table 10 of 40 CFR Part 63, Subpart CC for each control device used to comply with the Miscellaneous Process Vent provisions of 40 CFR 63.643 [See section A.II].

i. Thermal Incinerator control device

(a) The permittee shall maintain continuous records of the firebox temperature [40 CFR 63.644(a0(1)(i) See section A.III]. [Continuous records means documentation either in hard copy, or computer readable form, of data values measured at least once every hour and recorded at the frequency specified under 40 CFR 63.654(i) [See section A.III.].]

(b) The permittee shall record the firebox temperature averaged over the full period of the performance test that was reported in the Notification of Compliance Status.

(c) The permittee shall record the daily average firebox temperature for each operating day. [The daily average is the average of all recorded parameter values for the operating day. If all recorded values during an operating day are within the range established in the Notification of Compliance Status or operating permit, a statement to this effect can be recorded instead of the daily average.

ii. Catalytic Incinerator control device

(a) The permittee shall maintain continuous records of the temperature upstream and downstream of the catalyst bed [40 CFR 63.644(a)(1)(ii) See section A.III].

(b) The permittee shall record the upstream temperatures and the downstream temperature difference across the catalyst bed overaged over the full period of the performance test that was reported in the Notification of Compliance Status.

(c) The permittee shall record the daily average upstream temperature and downstream temperature difference across the catalyst bed for each operating day.

iii. Boiler or process heater control device with a design heat capacity less than 44 megawatts where the vent stream is not introduced into the flame zone.

(a) The permittee shall maintain continuous records of the firebox temperature [40 CFR 63.644(a)(4) See section A.III].

(b) The permittee shall record the firebox temperature averaged over the full period of the performance test as reported in the Notification of Compliance Status.

(c) The permittee shall record the daily average firebox temperature for each operating day.

iv. Flare control device

(a) The permittee shall maintain hourly records of whether the monitor was continuously operating and whether a pilot flame was continuously present at the pilot light [40 CFR 63.644(a)(2) See section A.III.] during each hour.

(b) The permittee shall record the presence of a flame at the pilot light over the full period of the compliance determination as reported in the Notification of Compliance Status.

(c) The permittee shall record the times and durations of all periods when all pilot flames for a flare are absent or the monitor is not operating.

v. All Control Devices

(a) The permittee shall maintain hourly records of whether the flow indicator used to monitor the presence of flow diverted to the atmosphere from the control device [40 CFR 63.644(c)(1) See section A.III] was operating and whether flow was detected at any time during each hour.

(b) The permittee shall record the times and durations of all periods when the vent stream is diverted through a bypass line or the monitor is not operating.

(c) The permittee shall maintain records that monthly inspections of sealed valves [40 CFR 63.644(c)(2) See section A.III] were performed.

(d) The permittee shall record all monthly inspections that show the valves are not closed or the seal has been changed.

c. [63.654] Reporting and Record Keeping Requirements

i. (a) [63.654(i)(2)]
Each permittee required to report the results of performance tests under 40 CFR 63.654 (f) and (g)(7) [See section A.IV.] shall retain a record

of all reported results as well as a complete test report, as described in 40 CFR 63.654(f)(2)(ii) of Subpart CC for each emission point tested.

(b) [63.654(i)(3)]
Each permittee required to continuously monitor operating parameters under 40 CFR 63.644 [See section A.III.] for miscellaneous process vents or under 40 CFR 63.652 and 63.653 for emission points in an emissions average shall keep the records specified in paragraphs 40 CFR 63.654(i)(3)(i) through (i)(3)(v) unless an alternative record keeping system has been requested and approved under paragraph (h)[See section A.III.].

(i) [63.654(i)(3)(i)]
The monitoring system shall measure data values at least once every hour.

(ii) [63.654(i)(3)(ii)]
The permittee shall record either:

(aa) [63.654(i)(3)(ii)(A)]
each measured data value; or

(bb) [63.654(i)(3)(ii)(B)]
block average values for 1 hour or shorter periods calculated from all measured data values during each period. If values are measured more frequently than once per minute, a single value for each minute may be used to calculate the hourly (or shorter period) block average instead of all measured values.

(iii) [63.654(i)(3)(iii)]
Daily average values of each continuously monitored parameter shall be calculated for each operating day and retained for 5 years except as specified in 40 CFR 63.654(i)(3)(iv) [See section A.III.].

(aa) [63.654(i)(3)(iii)(A)]
The daily average shall be calculated as the average of all values for a monitored parameter recorded during the operating day. The average shall cover a 24-hour period if operation is continuous, or the number of hours of operation per day if operation is not continuous.

( bb) [63.654(i)(3)(iii)(B)]

The operating day shall be the period defined in the Notification of Compliance Status report. It may be from midnight to midnight or another daily period.

(iv) [63.654(i)(3)(iv)]
If all recorded values for a monitored parameter during an operating day are within the range established in the Notification of Compliance Status report, the permittee may record that all values were within the range and retain this record for 5 years rather than calculating and recording a daily average for that day. For these days, the records required in 40 CFR 63.654(i)(3)(ii)[See section A.III.] shall also be retained for 5 years.

(v) [63.654(i)(3)(v)]
Monitoring data recorded during periods of monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments shall not be included in any average computed under 40 CFR Part 63, Subpart CC. Records shall be kept of the times and durations of all such periods and any other periods during process or control device operation when monitors are not operating.

ii. [63.645(h)] Process Changes to Group 2 Miscellaneous Process Vents - 40 CFR Part 63, Subpart CC
The permittee shall recalculate the TOC emission rate for each Group 2 process vent, as necessary, whenever process changes are made to determine whether the vent is in Group 1 or Group 2. Examples of process changes include, but are not limited to, changes in production capacity, production rate, or catalyst type, or whenever there is replacement, removal, or addition of recovery equipment. For purposes of this paragraph, process changes do not include: process upsets; unintentional, temporary process changes; and changes that are within the range on which the original calculation was based.

(a) [63.645(h)(1)]
The TOC emission rate shall be recalculated based on measurements of vent stream flow rate and TOC as specified in 40 CFR 63.645(e) and (f) [See section A.V], as applicable, or on best engineering assessment of the effects of the change. Engineering assessments shall meet the specifications in 40 CFR 63.645(g) [See section A.V].

(b) [63.654(h)(5)]
The permittee may request approval to use alternatives to the continuous operating parameter monitoring and record keeping provisions listed in 40 CFR 63.654(i) [See section A.III.].

(i) [63.654(h)(5)(i)]

Requests shall be submitted with the Application for Approval of Construction or Reconstruction for new sources and no later than 18 months prior to the compliance date for existing sources. The information may be submitted in an operating permit application, in an amendment to an operating permit application, or in a separate submittal. Requests shall contain the information specified in paragraphs (h)(5)(iii) through ()(5)(iv) of 40 CFR 63.654, as applicable.

(ii) [63.654(h)(5)(ii)]
The provisions in 40 CFR 63.8(f)(5)(i) of Subpart A of 40 CFR Part 63 shall govern the review and approval of requests.

(iii) [63.654(h)(5)(iii)]
The permittee may request approval to use an automated data compression recording system that does not record monitored operating parameter values at a set frequency (for example, once every hour) but records all values that meet set criteria for variation from previously recorded values.

(aa) [63.654(h)(5)(iii)(A)]
The requested system shall be designed to:

(aaa) [63.654(h)(5)(iii)(A)(1)]
measure the operating parameter value at least once every hour;

(bbb) [63.654(h)(5)(iii)(A)(2)]
record at least 24 values each day during periods of operation;

(ccc) [63.654(h)(5)(iii)(A)(3)]
record the date and time when monitors are turned off or on;

(ddd) [63.654(h)(5)(iii)(A)(4)]
recognize unchanging data that may indicate the monitor is not functioning properly, alert the operator, and record the incident; and

(eee) [63.654(h)(5)(iii)(A)(5)]
compute daily average values of the monitored operating parameter based on recorded data.

(bb) [63.654(h)(5)(iii)(B)]
The request shall contain a description of the monitoring system and data compression recording

system including the criteria used to determine which monitored values are recorded and retained, the method for calculating daily averages, and a demonstration that the system meets all criteria of 63.654(h)(5)(iii)(A) [See section A.III.]

(iv) [63.654(h)(5)(iv)]
The permittee may request approval to use other alternative monitoring systems according to the procedures specified in 40 CFR 63.8(f) of Subpart A of 40 CFR Part 63.

2. 40 CFR Part 60, Subpart VV

a. [60.482-10(l)] STANDARDS: CLOSED VENT SYSTEMS AND CONTROL DEVICES
The permittee shall record the information specified in paragraphs (l)(1) through (l)(5) of 40 CFR 60.482-10.

i. [60.482-10(l)(1)]
Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment.

ii. [60.482-10(l)(2)]
Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment.

iii. [60.482-10(l)(3)]
For each inspection during which a leak is detected, a record of the information specified in 60.486(c) [See section A.III.].

iv. [60.482-10(l)(4)]
For each inspection conducted in accordance with 60.485(b) [See section A.V.] during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

v. [60.482-10(l)(5)]
For each visual inspection conducted in accordance with section 60.482-10(f)(i) [See section A.II.] during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

b. [60.486] RECORD KEEPING REQUIREMENTS, EQUIPMENT LEAKS - 40 CFR Part 60, Subpart VV

i. (a) [60.486(a)(1)]
Each permittee subject to the provisions of 40 CFR Part 60, Subpart VV shall comply with the record keeping requirements of 40 CFR 60.486.

(b) [60.486(a)(2)]
A permittee of more than one affected facility subject to the provisions of 40 CFR Part 60, Subpart VV may comply with the record keeping requirements for these facilities in one record keeping system if the system identifies each record by each facility.

ii. [60.486(b)]
When each leak is detected as specified in 60.482-2, 60.482-3, 60.482-7, 60.482-8 and 40 CFR 60.483-2 [See section A.II], the following requirements apply:

(a) [60.486(b)(1)]
A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

(b) [60.486(b)(2)]
The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 60.482-7(c) [See section A.II.] and no leak has been detected during those 2 months.

(c) [60.486(b)(3)]
The identification on equipment except on a valve, may be removed after it has been repaired.

iii. [60.486(c)]
When each leak is detected as specified in 60.482-2, 60.482-3, 60.482-7, 60.482-8 and 40 CFR 60.483-2 [See section A.II.], the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:

(a) [60.486(c)(1)]
The instrument and operator identification numbers and the equipment identification number.

(b) [60.486(c)(2)]
The date the leak was detected and the dates of each attempt to repair the leak.

(c) [60.486(c)(3)]
Repair methods applied in each attempt to repair the leak.

(d) [60.486(c)(4)]
"Above 10,000" if the maximum instrument reading measured by the methods specified in 60.485(a) [See section A.V. after each repair attempt is equal to or greater than 10,000 ppm.

(e) [60.486(c)(5)]
"Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

(f) [60.486(c)(6)]
The signature of the person (or designate) whose decision it was that repair could not be effected without a process shutdown.

(g) [60.486(c)(7)]
The expected date of successful repair of the leak if a leak is not repaired within 15 days.

(h) [60.486(c)(8)]
Dates of process unit shutdowns that occur while the equipment is unrepaired.

(i) [60.486(c)(9)]
The date of successful repair of the leak.

iv. [60.486(d)]
The following information pertaining to the design requirements for closed vent systems and control devices described in 60.482-10 [See section A.II.] shall be recorded and kept in a readily accessible location:

(a) [60.486(d)(1)]
Detailed schematics, design specifications, and piping and instrumentation diagrams.

(b) [60.486(d)(2)]
The dates and descriptions of any changes in the design specifications.

(c) [60.486(d)(3)]
A description of the parameter or parameters monitored, as required in 60.482-10(e) [See section A.II.], to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.

(d) [60.486(d)(4)]
Periods when the closed vent systems and control devices required in 60.482-2, 60.482-3, 60.482-4, and 60.482-5 [See section A.II.] are not

operated as designed, including periods when a flare pilot light does not have a flame.

(e) [60.486(d)(5)]
Dates of startups and shutdowns of the closed vent systems and control devices required in 60.482-2, 60.482-3, 60.482-4, and 60.482-5 [See section A.II.].

v. [60.486(e)]
The following information pertaining to all equipment subject to the requirements in 60.482-1 to 60.482-10 [See section A.II.] shall be recorded in a log that is kept in a readily accessible location:

(a) [60.486(e)(1)]
A list of identification numbers for equipment subject to the requirements of 40 CFR Part 60, Subpart VV.

(b) (i) [60.486(e)(2)(i)]
A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 60.482-2(e), 60.482-3(i) and 60.482-7(f) [See section A.II.].

(ii) [60.486(e)(2)(ii)]
The designation of equipment subject to the requirements of 60.482-2(e), 60.482-3(i), or 60.482-7(f) [See section A.II.] shall be signed by the permittee.

(c) [60.486(e)(3)]
A list of equipment identification numbers for pressure relief devices required to comply with 60.482-4 [See section A.II.].

(d) (i) [60.486(e)(4)(i)]
The dates of each compliance test as required in 60.482-2(e), 60.482-3(i), 60.482-4, and 60.482-7(f) [See section A.II.].

(ii) [60.486(e)(4)(ii)]
The background level measured during each compliance test.

(iii) [60.486(e)(4)(iii)]
The maximum instrument reading measured at the equipment during each compliance test.

(e) [60.486(e)(5)]
A list of identification numbers for equipment in vacuum service.

vi. [60.486(f)]

The following information pertaining to all valves subject to the requirements of 60.482-7(g) and (h) [See section A.II.] and to all pumps subject to the requirements of 40 CFR 60.482-2(g) shall be recorded in a log that is kept in a readily accessible location:

(a) [60.486(f)(1)]
A list of identification numbers for valves that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump.

(b) [60.486(f)(2)]
A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each value.

vii. [60.486(g)]
The following information shall be recorded for valves complying with 40 CFR 60.483-2:

(a) [60.486(g)(1)]
A schedule of monitoring.

(b) [60.486(g)(2)]
The percent of valves found leaking during each monitoring period.

viii. [60.486(h)(1)-(2)]
The following information shall be recorded in a log that is kept in a readily accessible location:

(a) [60.486(h)(1)]
The design criterion required in 60.482-2(d)(5) and 60.482-3(e)(2) [See section A.II.]; and

(b) [60.486(h)(2)]
an explanation of the design criterion; along with any changes to this criterion and the reasons for the changes.

ix. [60.486(i)]
The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 CFR 60.480(d):

(a) [60.486(i)(1)]
an analysis demonstrating the design capacity of the affected facility;

(b) [60.486(i)(2)]
a statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol; and

(c) [60.486(i)(3)]
an analysis demonstrating that equipment is not in VOC service.

x. [60.486(j)]
Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location.

xi. [60.486(k)]
The provisions of 40 CFR 60.7(b) and (d) do not apply to affected facilities subject to 40 CFR Part 60, Subpart VV.

3. 40 CFR Part 63, Subpart H - National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks

a. [63.162(f)]
When each leak is detected as specified in 40 CFR 63.163 and 63.164; 40 CFR 63.168 and 63.169; and 40 CFR 63.172 through 63.174 [See section A.II], the following requirements apply:

i. [63.162(f)(1)]
A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

ii. [63.162(f)(2)]
The identification on a valve may be removed after it has been monitored as specified in 40 CFR 63.168(f)(3), and 63.175(e)(7)(i)(D), and no leak has been detected during the follow-up monitoring. If the permittee elects to comply using the provisions of 40 CFR 63.174(c)(1)(i), the identification on a connector may be removed after it is monitored as specified in 40 CFR 63.174(c)(1)(i) and no leak is detected during that monitoring.

iii. [63.162(f)(3)]
The identification which has been placed on equipment determined to have a leak, except for a valve or for a connector that is subject to the provisions of 40 CFR 63.174(c)(1)(i), may be removed after it is repaired.

b. 40 CFR 63.181 Record Keeping requirements.

i. [63.181(a)]
The permittee of more than one process unit subject to the provisions of 40 CFR Part 63, Subpart H may comply with the record keeping requirements for

these process units in one record keeping system if the system identifies each record by process unit and the program being implemented (e.g., quarterly monitoring, quality improvement) for each type of equipment. All records and information required by this section shall be maintained in a manner that can be readily accessed at the plant site. This could include physically locating the records at the plant site or accessing the records from a central location by computer at the plant site.

ii. [63.181(b)]
Except as provided in paragraph (e) of 40 CFR 63.181, the following information pertaining to all equipment in each process unit subject to the requirements in 40 CFR 63.162 through 63.174 [See section A.II] shall be recorded:

(a) (i) [63.181(b)(1)(i)]
A list of identification numbers for equipment (except connectors exempt from monitoring and record keeping identified in 40 CFR 63.174 and instrumentation systems) subject to the requirements of 40 CFR Part 63, Subpart H. Connectors need not be individually identified if all connectors in a designated area or length of pipe subject to the provisions of 40 CFR Part 63, Subpart H are identified as a group, and the number of connectors subject is indicated. With respect to connectors, the list shall be complete no later than the completion of the initial survey required by 40 CFR 63.174(b)(1) or (b)(2).

(ii) 63.181(b)(1)(ii)
A schedule by process unit for monitoring connectors subject to the provisions of 40 CFR 63.174(a) and valves subject to the provisions of 40 CFR 63.168(d).

(iii) [63.181(b)(1)(iii)]
Physical tagging of the equipment to indicate that it is in organic HAP service is not required. Equipment subject to the provisions of 40 CFR Part 63, Subpart H may be identified on a plant site plan, in log entries, or by other appropriate methods.

(b) (i) [63.181(b)(2)(i)]
A list of identification numbers for equipment that the permittee elects to equip with a closed-vent system and control device, under the provisions of 40 CFR 63.163(g), 40 CFR 63.164(h), 40 CFR 63.165(c), or 40 CFR 63.173(f).

(ii) [63.181(b)(2)(ii)]
A list of identification numbers for compressors that the permittee elects to designate as operating with an instrument

reading of less than 500 parts per million above background, under the provisions of 40 CFR 63.164(i).

(c) (i) [63.181(b)(3)(i)]
A list of identification numbers for pressure relief devices subject to the provisions in 40 CFR 63.165(a).

(ii) [63.181(b)(3)(ii)]
A list of identification numbers for pressure relief devices equipped with rupture disks, under the provisions of 40 CFR 63.165(d).

(d) [63.181(b)(4)]
Identification of instrumentation systems subject to the provisions of 40 CFR Part 63, Subpart H. Individual components in an instrumentation system need not be identified.

(e) [63.181(b)(5)]
Identification of screwed connectors subject to the requirements of 40 CFR 63.174(c)(2). Identification can be by area or grouping as long as the total number within each group or area is recorded.

(f) [63.181(b)(6)]
The following information shall be recorded for each dual mechanical seal system:

(i) [63.181(b)(6)(i)]
Design criteria required in 40 CFR 63.163(e)(6)(i), 63.164(e)(2), and 63.173(d)(6)(i) and an explanation of the design criteria; and

(ii) [63.181(b)(6)(ii)]
Any changes to these criteria and the reasons for the changes.

(g) [63.181(b)(7)]
The following information pertaining to all pumps subject to the provisions of 40 CFR 63.163(j), valves subject to the provisions of 40 CFR 63.168(h) and (i), agitators subject to the provisions of 40 CFR 63.173(h) through (j), and connectors subject to the provisions of 40 CFR 63.174(f) and (g) shall be recorded:

(i) [63.181(b)(7)(i)]
Identification of equipment designated as unsafe to monitor, difficult to monitor, or unsafe to inspect and the plan for monitoring or inspecting this equipment.

(ii) [63.181(b)(7)(ii)]

A list of identification numbers for the equipment that is designated as difficult to monitor, an explanation of why the equipment is difficult to monitor, and the planned schedule for monitoring this equipment.

(iii) [63.181(b)(7)(iii)]
A list of identification numbers for connectors that are designated as unsafe to repair and an explanation why the connector is unsafe to repair.

(h) (i) [63.181(b)(8)(i)]
A list of valves removed from and added to the process unit, as described in 40 CFR 63.168(e)(1), if the net credits for removed valves is expected to be used.

(ii) [63.181(b)(8)(ii)]
A list of connectors removed from and added to the process unit, as described in 40 CFR 63.174(i)(1), and documentation of the integrity of the weld for any removed connectors, as required in 40 CFR 63.174(j). This is not required unless the net credits for removed connectors is expected to be used.

iii. [63.181(c)]
For visual inspections of equipment subject to the provisions of 40 CFR Part 63, Subpart H (e.g., 40 CFR 63.163(b)(3), 40 CFR 63.163(e)(4)(i)) [See section A.II], the permittee shall document that the inspection was conducted and the date of the inspection. The permittee shall maintain records as specified in paragraph (d) of 40 CFR 63.181 for leaking equipment identified in this inspection, except as provided in paragraph (e) of 40 CFR 63.181. These records shall be retained for 2 years.

iv. [63.181(d)]
When each leak is detected as specified in 40 CFR 63.163 and 63.164; 40 CFR 63.168 and 63.169; and 40 CFR 63.172 through 63.174, the following information shall be recorded and kept for 2 years [See section A.II]:

(a) [63.181(d)(1)]
The instrument and the equipment identification number and the operator name, initials, or identification number.

(b) [63.181(d)(2)]
The date the leak was detected and the date of first attempt to repair the leak.

(c) [63.181(d)(3)]
The date of successful repair of the leak.

(d) [63.181(d)(4)]
Maximum instrument reading measured by Method 21 of part 60, Appendix A after it is successfully repaired or determined to be nonrepairable.

(e) [63.181(d)(5)]
"Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

(i) [63.181(d)(5)(i)]
The permittee may develop a written procedure that identifies the conditions that justify a delay of repair. The written procedures may be included as part of the startup/shutdown/malfunction plan, required by 40 CFR 63.6(e)(3), for the source or may be part of a separate document that is maintained at the plant site. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.

(ii) [63.181(d)(5)(ii)]
If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion.

(f) [63.181(d)(6)]
Dates of process unit shutdowns that occur while the equipment is unrepaired.

(g) (i) [63.181(d)(7)(i)]
Identification, either by list, location (area or grouping), or tagging of connectors that have been opened or otherwise had the seal broken since the last monitoring period required in 40 CFR 63.174(b), as described in 40 CFR 63.174(c)(1), unless the permittee elects to comply with the provisions of 40 CFR 63.174(c)(1)(ii).

(ii) [63.181(d)(7)(ii)]
The date and results of monitoring as required in 40 CFR 63.174(c). If identification of connectors that have been opened or otherwise had the seal broken is made by location under paragraph (d)(7)(i) of 40 CFR 63.181, then all connectors within the designated location shall be monitored.

(h) [63.181(d)(9)]

Copies of the periodic reports as specified in 40 CFR 63.182(d), if records are not maintained on a computerized database capable of generating summary reports from the records.

v. [63.181(f)]
The dates and results of each compliance test required for compressors subject to the provisions in 40 CFR 63.164(i) and the dates and results of the monitoring following a pressure release for each pressure relief device subject to the provisions in 40 CFR 63.165(a) and (b). The results shall include:

(a) [63.181(f)(1)]
The background level measured during each compliance test.

(b) [63.181(f)(2)]
The maximum instrument reading measured at each piece of equipment during each compliance test.

vi. [63.181(g)]
The permittee shall maintain records of the information specified in paragraphs (g)(1) through (g)(3) of 40 CFR 63.181 for closed-vent systems and control devices subject to the provisions of 40 CFR 63.172. The records specified in paragraph (g)(1) of 40 CFR 63.181 shall be retained for the life of the equipment. The records specified in paragraphs (g)(2) and (g)(3) of 40 CFR 63.181shall be retained for 2 years.

(a) [63.181(g)(1)]
The design specifications and performance demonstrations specified in paragraphs (g)(1)(i) through (g)(1)(iv) of 40 CFR 63.181.

(i) [63.181(g)(1)(i)]
Detailed schematics, design specifications of the control device, and piping and instrumentation diagrams.

(ii) [63.181(g)(1)(ii)]
The dates and descriptions of any changes in the design specifications.

(iii) [63.181(g)(1)(iii)]
The flare design (i.e., steam-assisted, air-assisted, or non-assisted) and the results of the compliance demonstration required by 40 CFR 63.11(b) of Subpart A of 40 CFR Part 63.

(iv) [63.181(g)(1)(iv)]
A description of the parameter or parameters monitored, as required in 40 CFR 63.172(e), to ensure that control devices are operated and maintained in conformance with their design and

an explanation of why that parameter (or parameters) was selected for the monitoring.

(b) [63.181(g)(2)]
Records of operation of closed-vent systems and control devices, as specified in paragraphs (g)(2)(i) through (g)(2)(iii) of 40 CFR 63.181.

(i) [63.181(g)(2)(i)]
Dates and durations when the closed-vent systems and control devices required in 40 CFR 63.163 through 63.166, and 40 CFR 63.170 [See section A.II] are not operated as designed as indicated by the monitored parameters, including periods when a flare pilot light system does not have a flame.

(ii) [63.181(g)(2)(ii)]
Dates and durations during which the monitoring system or monitoring device is inoperative.

(iii) [63.181(g)(2)(iii)]
Dates and durations of start-ups and shutdowns of control devices required in 40 CFR 63.163 through 63.166, and 40 CFR 63.170 [See section A.II].

(c) [63.181(g)(3)]
Records of inspections of closed-vent systems subject to the provisions of 40 CFR 63.172 [See section A.II], as specified in paragraphs (g)(3)(i) and (g)(3)(ii) of 40 CFR 63.181.

(i) [63.181(g)(3)(i)]
For each inspection conducted in accordance with the provisions of 40 CFR 63.172(f)(1) or (f)(2) during which no leaks were detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

(ii) [63.181(g)(3)(ii)]
For each inspection conducted in accordance with the provisions of 40 CFR 63.172(f)(1) or (f)(2) during which leaks were detected, the information specified in paragraph (d) of 40 CFR 63.181 shall be recorded.

vii. [63.181(h)]
Each permittee of a process unit subject to the requirements of 40 CFR 63.175 and 63.176 [See section A.II] shall maintain the records specified in paragraphs (h)(1) through (h)(9) of 40 CFR 63.181 for the period of the quality improvement program for the process unit.

(a) [63.181(h)(1)]
For permittees who elect to use a reasonable further progress quality improvement program, as specified in 40 CFR 63.175(d) [See section A.II]:

(i) [63.181(h)(1)(i)]
All data required in 40 CFR 63.175(d)(2).

(ii) [63.181(h)(1)(ii)]
The percent leaking valves observed each quarter and the rolling average percent reduction observed in each quarter.

(iii) [63.181(h)(1)(iii)]
The beginning and ending dates while meeting the requirements of 40 CFR 63.175(d).

(b) [63.181(h)(2)]
For permittees who elect to use a quality improvement program of technology review and improvement, as specified in 40 CFR 63.175(e) [See section A.II]:

(i) [63.181(h)(2)(i)]
All data required in 40 CFR 63.175(e)(2).

(ii) [63.181(h)(2)(ii)]
The percent leaking valves observed each quarter.

(iii) [63.181(h)(2)(iii)]
Documentation of all inspections conducted under the requirements of 40 CFR 63.175(e)(4), and any recommendations for design or specification changes to reduce leak frequency.

(iv) [63.181(h)(2)(iv)]
The beginning and ending dates while meeting the requirements of 40 CFR 63.175(e).

(c) [63.181(h)(3)]
For permittees subject to the requirements of the pump quality improvement program as specified in 40 CFR 63.176 [See section A.II]:

(i) [63.181(h)(3)(i)]
All data required in 40 CFR 63.176(d)(2).

(ii) [63.181(h)(3)(ii)]
The rolling average percent leaking pumps.

(iii) [63.181(h)(3)(iii)]
Documentation of all inspections conducted under the requirements of 40 CFR 63.176(d)(4), and any recommendations for design or specification changes to reduce leak frequency.

(iv) [63.181(h)(3)(iv)]
The beginning and ending dates while meeting the requirements of 40 CFR 63.176(d).

(d) [63.181(h)(4)]
If a leak is not repaired within 15 calendar days after discovery of the leak, the reason for the delay and the expected date of successful repair.

(e) [63.181(h)(5)]
Records of all analyses required in 40 CFR 63.175(e) and 63.176(d) [See section A.II]. The records will include the following:

(i) [63.181(h)(5)(i)]
A list identifying areas associated with poorer than average performance and the associated service characteristics of the stream, the operating conditions and maintenance practices.

(ii) [63.181(h)(5)(ii)]
The reasons for rejecting specific candidate superior emission performing valve or pump technology from performance trials.

(iii) [63.181(h)(5)(iii)]
The list of candidate superior emission performing valve or pump technologies, and documentation of the performance trial program items required under 40 CFR 63.175(e)(6)(iii) and 63.176(d)(6)(iii).

(iv) [63.181(h)(5)(iv)]
The beginning date and duration of performance trials of each candidate superior emission performing technology.

(f) [63.181(h)(6)]
All records documenting the quality assurance program for valves or pumps as specified in 40 CFR 63.175(e)(7) and 63.176(d)(7) [See section A.II].

(g) [63.181(h)(7)]
Records indicating that all valves or pumps replaced or modified during the period of the quality improvement program are in

compliance with the quality assurance requirements in 40 CFR 63.175(e)(7) and 40 CFR 63.176(d)(7) [See section A.II].

(h) [63.181(h)(8)]
Records documenting compliance with the 20 percent or greater annual replacement rate for pumps as specified in 40 CFR 63.176(d)(8) [See section A.II].

(i) [63.181(h)(9)]
Information and data to show the corporation has fewer than 100 employees, including employees providing professional and technical contracted services.

viii. [63.181(i)]
The permittee of equipment in heavy liquid service shall comply with the requirements of either paragraph (i)(1) or (i)(2) of 40 CFR 63.181, as provided in paragraph (i)(3) of 40 CFR 63.181.

(a) [63.181(i)(1)]
Retain information, data, and analyses used to determine that a piece of equipment is in heavy liquid service.

(b) [63.181(i)(2)]
When requested by the Administrator, demonstrate that the piece of equipment or process is in heavy liquid service.

(c) [63.181(i)(3)]
A determination or demonstration that a piece of equipment or process is in heavy liquid service shall include an analysis or demonstration that the process fluids do not meet the definition of "in light liquid service." Examples of information that could document this include, but are not limited to, records of chemicals purchased for the process, analyses of process stream composition, engineering calculations, or process knowledge.

ix. [63.181(j)]
Identification, either by list, location (area or group) of equipment in organic HAP service less than 300 hours per year within a process unit subject to the provisions of 40 CFR Part 63, Subpart H under 40 CFR 63.160 [See section A.II].

x. [63.181(k)]
Permittees choosing to comply with the requirements of 40 CFR 63.179 [See section A.II] shall maintain the following records:

(a) [63.181(k)(1)]

Identification of the process unit(s) and the organic HAP's they handle.

(b) [63.181(k)(2)]
A schematic of the process unit, enclosure, and closed-vent system.

(c) [63.181(k)(3)]
A description of the system used to create a negative pressure in the enclosure to ensure that all emissions are routed to the control device.

4. 40 CFR Part 61, Subpart FF - National Emission Standard for Benzene Waste Operations

a. [61.343] STANDARDS: TANKS

i. [61.343(c)]
Each fixed-roof, seal, access door, and all other openings shall be checked by visual inspection initially and quarterly thereafter to ensure that no cracks or gaps occur and that access doors and other openings are closed and gasketed properly.

ii. [61.343(d)]
Except as provided in 40 CFR 61.350 [See section A.III.], when a broken seal or gasket or other problem is identified, or when detectable emissions are measured, first efforts at repair shall be made as soon as practicable, but not later than 45 calendar days after identification.

b. [61.344] STANDARDS: SURFACE IMPOUNDMENTS - 40 CFR Part 61, Subpart FF

i. [61.344(b)]
Each cover seal, access hatch, and all other openings shall be checked by visual inspection initially and quarterly thereafter to ensure that no cracks or gaps occur and that access hatches and other openings are closed and gasketed properly.

ii. [61.344(c)]
Except as provided in 40 CFR 61.350 [See section A.III], when a broken seal or gasket or other problem is identified, or when detectable emissions are measured, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after identification.

c. [61.345] STANDARDS: CONTAINERS - 40 CFR Part 61, Subpart FF

i. [61.345(b)]
Each cover and all openings shall be visually inspected initially and quarterly thereafter to ensure that they are closed and gasketed properly.

ii. [61.345(c)]
Except as provided in 40 CFR 61.350 [See section A.III.], when a broken seal or gasket or other problem is identified, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after identification.

d. [61.346] STANDARDS: INDIVIDUAL DRAIN SYSTEMS - 40 CFR Part 61, Subpart FF

i. [61.346(a)(2)]
Each cover seal, access hatch, and all other openings shall be checked by visual inspection initially and quarterly thereafter to ensure that no cracks or gaps occur and that access hatches and other openings are closed and gasketed properly.

ii. [61.346(a)(3)]
Except as provided in 40 CFR 61.350 [See section A.III.], when a broken seal or gasket or other problem is identified, or when detectable emissions are measured, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after identification.

iii. [61.346(b)(4)]
If the permittee elects to comply with the alternative standards under 40 CFR 61.346(b) [See section A.III], then the permittee shall inspect the equipment installed under 40 CFR 63.646(b)(1), (b)(2), or (b)(3) as follows in lieu of 40 CFR 61.346(a)(2) and (a)(3):

(a) [63.646(b)(4)(i)]
Each drain using water seal controls shall be checked by visual or physical inspection initially and thereafter quarterly for indications of low water levels or other conditions that would reduce the effectiveness of water seal controls.

(b) [61.346(b)(4)(ii)]
Each drain using a tightly sealed cap or plug shall be visually inspected initially and thereafter quarterly to ensure caps or plugs are in place and properly installed.

(c) [61.346(b)(4)(iii)]
Each junction box shall be visually inspected initially and thereafter quarterly to ensure that the cover is in place and to ensure that the cover has a tight seal around the edge.

(d) [61.346(b)(4)(iv)]
The unburied portion of each sewer line shall be visually inspected initially and thereafter quarterly for indication of cracks, gaps, or other problems that could result in benzene emissions.

(e) [61.346(b)(5)]
Except as provided in 40 CFR 61.350 [See section A.III], when a broken seal, gap, crack or other problem is identified, first efforts at

repair shall be made as soon as practicable, but not later than 15 calendar days after identification.

e. [61.347] STANDARDS: Oil-Water Separators

i. [61.347(b)]
Each cover seal, access hatch, and all other openings shall be checked by visual inspection initially and quarterly thereafter to ensure that no cracks or gaps occur between the cover and oil-water separator wall and that access hatches and other openings are closed and gasketed properly.

ii. [61.347(c)]
Except as provided in 40 CFR 61.350, when a broken seal or gasket or other problem is identified, or when detectable emissions are measured, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after identification.

f. [61.348] STANDARDS: TREATMENT PROCESSES - 40 CFR Part 61, Subpart FF

i. [61.348(e)(1)]
Each seal, access door, and all other openings shall be checked by visual inspections initially and quarterly thereafter to ensure that no cracks or gaps occur and that openings are closed and gasketed properly.

ii. [61.348(e)(2)]
Except as provided in 40 CFR 61.350 [See section A.III.], when a broken seal or gasket or other problem is identified, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after identification.

iii. [61.348(g)]
The permittee of a treatment process or wastewater treatment system unit that is used to comply with the provisions of 40 CFR 61.348 shall monitor the unit in accordance with the applicable requirements in 40 CFR 61.354 [See section A.III.].

g. [61.349] STANDARDS: CLOSED VENT SYSTEMS- 40 CFR Part 61, Subpart FF

i. [61.349(f)]
Each closed-vent system and control device shall be visually inspected initially and quarterly thereafter. The visual inspection shall include inspection of ductwork and piping and connections to covers and control devices for evidence of visible defects such as holes in ductwork or piping and loose connections.

ii. [61.349(g)]
Except as provided in 61.350 [See section A.III.], if visible defects are observed during an inspection, or if other problems are identified, or if

detectable emissions are measured, a first effort to repair the closed-vent system and control device shall be made as soon as practicable but no later than 5 calendar days after detection. Repair shall be completed no later than 15 calendar days after the emissions are detected or the visible defect is observed.

iii. [61.349(h)]
The permittee of a control device that is used to comply with the provisions of 40 CFR 61.349 shall monitor the control device in accordance with 40 CFR 61.354(c) [See section A.III].

h. [61.350] STANDARDS: DELAY OF REPAIR - 40 CFR Part 61, Subpart FF

i. [61.350(a)]
Delay of repair of facilities or units that are subject to the provisions will be allowed if the repair is technically impossible without a complete or partial facility or unit shutdown.

ii. [61.350(b)]
Repair of such equipment shall occur before the end of the next facility or unit shutdown.

i. [61.354] MONITORING OF OPERATIONS - 40 CFR Part 61, Subpart FF

i. [61.354(a)]
Except for a treatment process or waste stream complying with 40 CFR 61.348(d), the permittee shall monitor each treatment process or wastewater treatment system unit to ensure the unit is properly operated and maintained by one of the following monitoring procedures:

(a) [61.354(a)(1)]
Measure the benzene concentration of the waste stream exiting the treatment process complying with 40 CFR 61.348(a)(1)(i) [See section A.II] at least once per month by collecting and analyzing one or more samples using the procedures specified in 40 CFR 61.355(c)(3) [See section A.V].

(b) [61.354(a)(2)]
Install, calibrate, operate, and maintain according to manufacturer's specifications equipment to continuously monitor and record a process parameter (or parameters) for the treatment process or wastewater treatment system unit that indicates proper system operation. The permittee shall inspect at least once each operating day the data recorded by the monitoring equipment (e.g., temperature monitor or flow indicator) to ensure that the unit is operating properly.

ii. [61.354(b)]

If a permittee complies with the requirements of 40 CFR 61.348(b) [See section A.II.], then the permittee shall monitor each wastewater treatment system to ensure the unit is properly operated and maintained by the appropriate monitoring procedure as follows:

(a) [61.354(b)(1)]
For the first exempt waste management unit in each waste treatment train, other than an enhanced biodegradation unit, measure the flow rate, using the procedures of 40 CFR 61.355(b) [See section A.V.], and the benzene concentration of each waste stream entering the unit at least once per month by collecting and analyzing one or more samples using the procedures specified in 40 CFR 61.355(c)(3) [See section A.V.].

(b) [61.354(b)(2)]
For each enhanced biodegradation unit that is the first exempt waste management unit in a treatment train, measure the benzene concentration of each waste stream entering the unit at least once per month by collecting and analyzing one or more samples using the procedures specified in 40 CFR 61.355(c)(3) [See section A.V.].

iii. [61.354(c)]
The permittee subject to the requirements in 40 CFR 61.349 [See section A.II] shall install, calibrate, maintain, and operate according to the manufacturer's specifications a device to continuously monitor the control device operation as specified in the following paragraphs, unless alternative monitoring procedures or requirements are approved for that facility by the Administrator of USEPA. The permittee shall inspect at least once each operating day the data recorded by the monitoring equipment (e.g., temperature monitor or flow indicator) to ensure that the control device is operating properly.

(a) [61.354(c)(1)]
For a thermal vapor incinerator, a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of ±1 percent of the temperature being monitored in °C or ±0.5°C, whichever is greater. The temperature sensor shall be installed at a representative location in the combustion chamber.

(b) [61.354(c)(2)]
For a catalytic vapor incinerator, a temperature monitoring device equipped with a continuous recorder. The device shall be capable of monitoring temperature at two locations, and have an accuracy of ±1 percent of the temperature being monitored in °C or ±0.5°C, whichever is greater. One temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed inlet and a second temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed outlet.

(c) [61.354(c)(3)]
For a flare, a monitoring device in accordance with 40 CFR 60.18(f)(2) equipped with a continuous recorder.

(d) [61.354(c)(4)]
For a boiler or process heater having a design heat input capacity less than 44 MW (150 x $10^6$ Btu), a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of ±1 percent of the temperature being monitored in °C or ±0.5°C, whichever is greater. The temperature sensor shall be installed at a representative location in the combustion chamber.

(e) [61.354(c)(5)]
For a boiler or process heater having a design heat input capacity greater than or equal to 44 MW (150 x $10^6$ Btu), a monitoring device equipped with a continuous recorder to measure a parameter(s) that indicates good combustion operating practices are being used.

(f) [61.354(c)(6)]
For a condenser, either:

(i) [61.354(c)(6)(i)]
A monitoring device equipped with a continuous recorder to measure either the concentration level of the organic compounds or the concentration level of benzene in the exhaust vent stream from the condenser; or

(ii) [CFR 61.354(c)(6)(ii)]
A temperature monitoring device equipped with a continuous recorder. The device shall be capable of monitoring temperature at two locations, and have an accuracy of ±1 percent of the temperature being monitored in °C or ±0.5°C, whichever is greater. One temperature sensor shall be installed at a location in the exhaust stream from the condenser, and a second temperature sensor shall be installed at a location in the coolant fluid exiting the condenser.

(g) [61.354(c)(7)]
For a carbon adsorption system that regenerates the carbon bed directly in the control device such as a fixed-bed carbon adsorber, either:

(i) [61.354(c)(7)(i)]
A monitoring device equipped with a continuous recorder to measure either the concentration level of the organic compounds or the benzene concentration level in the exhaust vent stream from the carbon bed; or

(ii) [61.354(c)(7)(ii)]
A monitoring device equipped with a continuous recorder to measure a parameter that indicates the carbon bed is regenerated on a regular, predetermined time cycle.

(h) [61.354(c)(8)]
For a vapor recovery system other than a condenser or carbon adsorption system, a monitoring device equipped with a continuous recorder to measure either the concentration level of the organic compounds or the benzene concentration level in the exhaust vent stream from the control device.

(i) [61.354(c)(9)]
For a control device subject to the requirements of 40 CFR 61.349(a)(2)(iv) [See section A.II], devices to monitor the parameters as specified in 40 CFR 61.349(a)(2)(iv)(C).

iv. [61.354(d)]
For a carbon adsorption system that does not regenerate the carbon bed directly on site in the control device (e.g., a carbon canister), either the concentration level of the organic compounds or the concentration level of benzene in the exhaust vent stream from the carbon adsorption system shall be monitored on a regular schedule, and the existing carbon shall be replaced with fresh carbon immediately when carbon breakthrough is indicated. The device shall be monitored on a daily basis or at intervals no greater than 20 percent of the design carbon replacement interval, whichever is greater. As an alternative to conducting this monitoring, a permittee may replace the carbon in the carbon adsorption system with fresh carbon at a regular predetermined time interval that is less than the carbon replacement interval that is determined by the maximum design flow rate and either the organic concentration or the benzene concentration in the gas stream vented to the carbon adsorption system.

v. [61.354(e)]
An alternative operation or process parameter may be monitored if it can be demonstrated that another parameter will ensure that the control device is operated in conformance with these standards and the control device's design specifications.

vi. [61.354(f)]
The permittee using a closed-vent system that contains any bypass line that could divert a vent stream from a control device used to comply with the provisions of 40 CFR Part 61, Subpart FF shall do the following:

(a) [61.354(f)(1)]
Visually inspect the bypass line valve at least once every month, checking the position of the valve and the condition of the car-seal or

closure mechanism required under 40 CFR 61.349(a)(1)(ii) [See section A.II] to ensure that the valve is maintained in the closed position and the vent stream is not diverted through the bypass line.

(b) [61.354(f)(2)]
Visually inspect the readings from each flow monitoring device required by 40 CFR 61.349(a)(1)(ii) at least once each operating day to check that vapors are being routed to the control device as required.

vii. [61.354(g)]
Each permittee who uses a system for emission control that is maintained at a pressure less than atmospheric pressure with openings to provide dilution air shall install, calibrate, maintain, and operate according to the manufacturer's specifications a device equipped with a continuous recorder to monitor the pressure in the unit to ensure that it is less than atmospheric pressure.

j. [61.356] RECORD KEEPING REQUIREMENTS - 40 CFR Part 61, Subpart FF

i. [61.356(a)]
The permittee shall comply with the record keeping requirements of 40 CFR 61.356. Each record shall be maintained in a readily accessible location at the facility site for a period not less than two years from the date the information is recorded unless otherwise specified.

ii. [61.356(b)]
The permittee shall maintain records that identify each waste stream at the facility subject to 40 CFR Part 61, Subpart FF, and indicate whether or not the waste stream is controlled for benzene emissions in accordance with 40 CFR Part 61, Subpart FF. In addition the permittee shall maintain the following records:

(a) [61.356(b)(1)]
For each waste stream not controlled for benzene emissions in accordance with 40 CFR Part 61, Subpart FF, the records shall include all test results, measurements, calculations, and other documentation used to determine the following information for the waste stream: waste stream identification, water content, whether or not the waste stream is a process wastewater stream, annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.

(b) [61.356(b)(2)]
For each waste stream exempt from 40 CFR 61.342(c)(1) [See section A.II.] in accordance with 40 CFR 61.342(c)(3) [See section A.II.], the records shall include:

(i) [61.356(b)(2)(i)]

All measurements, calculations, and other documentation used to determine that the continuous flow of process wastewater is less than 0.02 liters (0.005 gallons) per minute or the annual waste quantity of process wastewater is less than 10 Mg/yr (11 ton/yr) in accordance with 40 CFR 61.342(c)(3)(i) [See section A.II.], or

(ii) [61.356(b)(2)(ii)]
All measurements, calculations, and other documentation used to determine that the sum of the total annual benzene quantity in all exempt waste streams does not exceed 2.0 Mg/yr (2.2 ton/yr) in accordance with 40 CFR 61.342(c)(3)(ii) [See section A.II.].

(c) [61.356(b)(3)]
For each facility where process wastewater streams are controlled for benzene emissions in accordance with 40 CFR 61.342(d) , the records shall include for each treated process wastewater stream all measurements, calculations, and other documentation used to determine the annual benzene quantity in the process wastewater stream exiting the treatment process.

(d) [61.356(b)(4)]
For each facility where waste streams are controlled for benzene emissions in accordance with 40 CFR 61.342(e), the records shall include for each waste stream all measurements, including the locations of the measurements, calculations, and other documentation used to determine that the total benzene quantity does not exceed 6.0 Mg/yr (6.6 ton/yr).

(e) [61.356(b)(5)]
For each facility where the annual waste quantity for process unit turnaround waste is determined in accordance with 40 CFR 61.355(b)(5) [See section A.V.], the records shall include all test results, measurements, calculations, and other documentation used to determine the following information: identification of each process unit at the facility that undergoes turnarounds, the date of the most recent turnaround for each process unit, identification of each process unit turnaround waste, the water content of each process unit turnaround waste, the annual waste quantity determined in accordance with 40 CFR 61.355(b)(5) [See section A.V.], the range of benzene concentrations in the waste, the annual average flow-weighted benzene concentration of the waste, and the annual benzene quantity calculated in accordance with 40 CFR 61.355(a)(1)(iii) [See section A.V.].

(f) [61.356(b)(6)]

For each facility where wastewater streams are controlled for benzene emissions in accordance with 40 CFR 61.348(b)(2) [See section A.II.], the records shall include all measurements, calculations, and other documentation used to determine the annual benzene content of the waste streams and the total annual benzene quantity contained in all waste streams managed or treated in exempt waste management units.

iii. [61.356(c)]
The permittee transferring waste off-site to another facility for treatment in accordance with 40 CFR 61.342(f) [See section A.II] shall maintain documentation for each offsite waste shipment that includes the following information: Date waste is shipped offsite, quantity of waste shipped offsite, name and address of the facility receiving the waste, and a copy of the notice sent with the waste shipment.

iv. [61.356(d)]
A permittee using control equipment in accordance with 40 CFR 61.343 through 61.347 [see sections A.II] shall maintain engineering design documentation for all control equipment that is installed on the waste management unit. The documentation shall be retained for the life of the control equipment. If a control device is used, then the permittee shall maintain the control device records required by 40 CFR 61.355(f) [See section A.IV].

v. [61.356(e)]
A permittee using a treatment process or wastewater treatment system unit in accordance with 40 CFR 61.348 [See section A.II.] shall maintain the following records. The documentation shall be retained for the life of the unit.

(a) [61.356(e)(1)]
A statement signed and dated by the permittee certifying that the unit is designed to operate at the documented performance level when the waste stream entering the unit is at the highest waste stream flow rate and benzene content expected to occur.

(b) [61.356(e)(2)]
If engineering calculations are used to determine treatment process or wastewater treatment system unit performance, then the permittee shall maintain the complete design analysis for the unit. The design analysis shall include for example the following information: Design specifications, drawings, schematics, piping and instrumentation diagrams, and other documentation necessary to demonstrate the unit performance.

(c) [61.356(e)(3)]
If performance tests are used to determine treatment process or wastewater treatment system unit performance, then the permittee shall

maintain all test information necessary to demonstrate the unit performance.

(i) [61.356(e)(3)(i)]
A description of the unit including the following information: type of treatment process; manufacturer name and model number; and for each waste stream entering and exiting the unit, the waste stream type (e.g., process wastewater, sludge, slurry, etc.), and the design flow rate and benzene content.

(ii) [61.356(e)(3)(ii)]
Documentation describing the test protocol and the means by which sampling variability and analytical variability were accounted for in the determination of the unit performance. The description of the test protocol shall include the following information: sampling locations, sampling method, sampling frequency, and analytical procedures used for sample analysis.

(iii) [61.356(e)(3)(iii)]
Records of unit operating conditions during each test run including all key process parameters.

(iv) [61.356(e)(3)(iv)]
All test results.

(d) [61.356(e)(4)]
If a control device is used, then the permittee shall maintain the control device records required by 40 CFR 61.356(f).

vi. [61.356(f)]
The permittee using a closed-vent system and control device in accordance with 40 CFR 61.349 [See section A.II.] shall maintain the following records. The documentation shall be retained for the life of the control device.

(a) [61.356(f)(1)]
A statement signed and dated by the permittee certifying that the closed-vent system and control device is designed to operate at the documented performance level when the waste management unit vented to the control device is or would be operating at the highest load or capacity expected to occur.

(b) [61.356(f)(2)]
If engineering calculations are used to determine control device performance in accordance with 40 CFR 61.349(c), then a design analysis for the control device that includes for example:

(i) [61.356(f)(2)(i)]

Specifications, drawings, schematics, and piping and instrumentation diagrams prepared by the permittee, or the control device manufacturer or vendor that describe the control device design based on acceptable engineering texts. The design analysis shall address the following vent stream characteristics and control device operating parameters:

(aa) [61.356(f)(2)(i)(A)]
For a thermal vapor incinerator, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average temperature in the combustion zone and the combustion zone residence time.

(bb) [61.356(f)(2)(i)(B)]
For a catalytic vapor incinerator, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average temperatures across the catalyst bed inlet and outlet.

(cc) [61.356(f)(2)(i)(C)]
For a boiler or process heater, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average flame zone temperatures, combustion zone residence time, and description of method and location where the vent stream is introduced into the flame zone.

(dd) [61.356(f)(2)(i)(D)]
For a flare, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also consider the requirements specified in 40 CFR 60.18.

(ee) [61.356(f)(2)(i)(E)]
For a condenser, the design analysis shall consider the vent stream composition, constituent concentration, flow rate, relative humidity, and temperature. The design analysis shall also establish the design outlet organic compound concentration level or the design outlet benzene concentration level, design average temperature of the condenser exhaust vent stream, and the design average temperatures of the coolant fluid at the condenser inlet and outlet.

(ff) [61.356(f)(2)(i)(F)]
For a carbon adsorption system that regenerates the carbon bed directly on-site in the control device such as a fixed-bed adsorber, the design analysis shall consider the vent stream composition, constituent concentration, flow rate, relative humidity, and temperature. The design analysis shall also establish the design exhaust vent stream organic compound concentration level or the design exhaust vent stream benzene concentration level, number and capacity of carbon beds, type and working capacity of activated carbon used for carbon beds, design total steam flow over the period of each complete carbon bed regeneration cycle, duration of the carbon bed steaming and cooling/drying cycles, design carbon bed temperature after regeneration, design carbon bed regeneration time, and design service life of carbon.

(gg) [61.356(f)(2)(i)(G)]
For a carbon adsorption system that does not regenerate the carbon bed directly on-site in the control device, such as a carbon canister, the design analysis shall consider the vent stream composition, constituent concentration, flow rate, relative humidity, and temperature. The design analysis shall also establish the design exhaust vent stream organic compound concentration level or the design exhaust vent stream benzene concentration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule.

(hh) [61.356(f)(2)(i)(H)]
For a control device subject to the requirements of 40 CFR 61.349(a)(2)(iv) [See section A.II], the design analysis shall consider the vent stream composition, constituent concentration, and flow rate. The design analysis shall also include all of the information submitted under 40 CFR 61.349(a)(2)(iv).

(c) [61.356(f)(3)]
If performance tests are used to determine control device performance in accordance with 40 CFR 61.349(c) [See section A.II.]:

(i) [61.356(f)(3)(i)]

A description of how it is determined that the test is conducted when the waste management unit or treatment process is operating at the highest load or capacity level. This description shall include the estimated or design flow rate and organic content of each vent stream and definition of the acceptable operating ranges of key process and control parameters during the test program.

(ii) [61.356(f)(3)(ii)]
A description of the control device including the type of control device, control device manufacturer's name and model number, control device dimensions, capacity, and construction materials.

(iii) [61.356(f)(3)(iii)]
A detailed description of sampling and monitoring procedures, including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis.

(iv) [61.356(f)(3)(iv)]
All test results.

vii. [61.356(g)]
The permittee shall maintain a record for each visual inspection required by 40 CFR 61.343 through 61.347 [See section A.III.] that identifies a problem (such as a broken seal, gap or other problem) which could result in benzene emissions. The record shall include the date of the inspection, waste management unit and control equipment location where the problem is identified, a description of the problem, a description of the corrective action taken, and the date the corrective action was completed.

viii. [61.356(h)]
A permittee shall maintain a record for each test of no detectable emissions required by 40 CFR 61.343 through 61.347 and 61.349 [see sections A.III.]. The record shall include the following information: date the test is performed, background level measured during test, and maximum concentration indicated by the instrument reading measured for each potential leak interface. If detectable emissions are measured at a leak interface, then the record shall also include the waste management unit, control equipment, and leak interface location where detectable emissions were measured, a description of the problem, a description of the corrective action taken, and the date the corrective action was completed.

ix. [61.356(i)]
For each treatment process and wastewater treatment system unit operated to comply with 40 CFR 61.348 [See section A.II.], the permittee shall maintain

documentation that includes the following information regarding the unit operation:

(a) [61.356(i)(1)]
Dates of startup and shutdown of the unit.

(b) [61.356(i)(2)]
If measurements of waste stream benzene concentration are performed in accordance with 40 CFR 61.354(a)(1), the permittee shall maintain records that include date each test is performed and all test results.

(c) [61.356(i)(3)]
If a process parameter is continuously monitored in accordance with 40 CFR 61.354(a)(2), the permittee shall maintain records that include a description of the operating parameter (or parameters) to be monitored to ensure that the unit will be operated in conformance with these standards and the unit's design specifications, and an explanation of the criteria used for selection of that parameter (or parameters). This documentation shall be kept for the life of the unit.

(d) [61.356(i)(4)]
If measurements of waste stream benzene concentration are performed in accordance with 40 CFR 61.354(b) [See section A.III.], the permittee shall maintain records that include the date each test is performed and all test results.

(e) [61.356(i)(5)]
Periods when the unit is not operated as designed.

x. [61.356(j)]
For each control device, the permittee shall maintain documentation that includes the following information regarding the control device operation:

(a) [61.356(j)(1)]
Dates of startup and shutdown of the closed-vent system and control device.

(b) [61.356(j)(2)]
A description of the operating parameter (or parameters) to be monitored to ensure that the control device will be operated in conformance with these standards and the control device's design specifications and an explanation of the criteria used for selection of that parameter (or parameters). This documentation shall be kept for the life of the control device.

(c) [61.356(j)(3)]

Periods when the closed-vent system and control device are not operated as designed including all periods and the duration when:

(i) [61.356(j)(3)(i)]
Any valve car-seal or closure mechanism required under 40 CFR 61.349(a)(1)(ii) [See section A.II.] is broken or the by-pass line valve position has changed.

(ii) [61.356(j)(3)(ii)]
The flow monitoring devices required under 40 CFR 61.349(a)(1)(ii) [See section A.II.] indicate that vapors are not routed to the control device as required.

(d) [61.356(j)(4)]
If a thermal vapor incinerator is used, then the permittee shall maintain continuous records of the temperature of the gas stream in the combustion zone of the incinerator and records of all 3-hour periods of operation during which the average temperature of the gas stream in the combustion zone is more than 28°C below the design combustion zone temperature.

(e) [61.356(j)(5)]
If a catalytic vapor incinerator is used, then the permittee shall maintain continuous records of the temperature of the gas stream both upstream and downstream of the catalyst bed of the incinerator, records of all 3-hour periods of operation during which the average temperature measured before the catalyst bed is more than 28°C below the design gas stream temperature, and records of all 3-hour periods of operation during which the average temperature difference across the catalyst bed is less than 80 percent of the design temperature difference.

(f) [61.356(j)(6)]
If a boiler or process heater is used, then the permittee shall maintain records of each occurrence when there is a change in the location at which the vent stream is introduced into the flame zone as required by 40 CFR 61.349(a)(2)(i)(C) [See section A.II]. For a boiler or process heater having a design heat input capacity less than 44 MW ($150 \times 10^6$ Btu), the permittee shall maintain continuous records of the temperature of the gas stream in the combustion zone of the boiler or process heater and records of all 3-hour periods of operation during which the average temperature of the gas stream in the combustion zone is more than 28°C below the design combustion zone temperature. For a boiler or process heater having a design heat input capacity greater than or equal to 44 MW ($150 \times 10^6$ Btu), the permittee shall maintain continuous records of the parameter(s) monitored in

accordance with the requirements of 40 CFR 61.354(c)(5) [See section A.III].

(g) [61.356(j)(7)]
If a flare is used, then the permittee shall maintain continuous records of the flare pilot flame monitoring and records of all periods during which the pilot flame is absent.

(h) [61.356(j)(8)]
If a condenser is used, then the permittee shall maintain records from the monitoring device of the parameters selected to be monitored in accordance with 40 CFR 61.354(c)(6). If concentration of organics or concentration of benzene in the control device outlet gas stream is monitored, then the permittee shall record all 3-hour periods of operation during which the concentration of organics or the concentration of benzene in the exhaust stream is more than 20 percent greater than the design value. If the temperature of the condenser exhaust stream and coolant fluid is monitored, then the permittee shall record all 3-hour periods of operation during which the temperature of the condenser exhaust vent stream is more than 6°C above the design average exhaust vent stream temperature, or the temperature of the coolant fluid exiting the condenser is more than 6°C above the design average coolant fluid temperature at the condenser outlet.

(i) [61.356(j)(9)]
If a carbon adsorber is used, then the permittee shall maintain records from the monitoring device of the concentration of organics or the concentration of benzene in the control device outlet gas stream. If the concentration of organics or the concentration of benzene in the control device outlet gas stream is monitored, then the permittee shall record all 3-hour periods of operation during which the concentration of organics or the concentration of benzene in the exhaust stream is more than 20 percent greater than the design value. If the carbon bed regeneration interval is monitored, then the permittee shall record each occurrence when the vent stream continues to flow through the control device beyond the predetermined carbon bed regeneration time.

(j) [61.356(j)(10)]
If a carbon adsorber that is not regenerated directly on site in the control device is used, then the permittee shall maintain records of dates and times when the control device is monitored, when breakthrough is measured, and shall record the date and time then the existing carbon in the control device is replaced with fresh carbon.

(k) [61.356(j)(11)]
If an alternative operational or process parameter is monitored for a control device, as allowed in 40 CFR 61.354(e) , then the permittee

shall maintain records of the continuously monitored parameter, including periods when the device is not operated as designed.

(l) [61.356(j)(12)]
If a control device subject to the requirements of 40 CFR 61.349(a)(2)(iv) [See section A.II] is used, then the permittee shall maintain records of the parameters that are monitored and each occurrence when the parameters monitored are outside the range of values specified in 40 CFR 61.349(a)(2)(iv)(C) [See section A.II], or other records as specified by the Administrator of U.S. EPA.

xi. [61.356(k)]
The permittee who elects to install and operate the control equipment in 40 CFR 61.351 [See section A.II.] shall comply with the record keeping requirements in 40 CFR 60.115b.

xii. [61.356(l)]
The permittee who elects to install and operate the control equipment in 40 CFR 61.352 [See section A.II] shall maintain records of the following:

(a) [61.356(l)(1)]
The date, location, and corrective action for each visual inspection required by 40 CFR 60.693-2(a)(5), during which a broken seal, gap, or other problem is identified that could result in benzene emissions.

(b) [61.356(l)(2)]
Results of the seal gap measurements required by 40 CFR 60.693-2(a).

xiii. [61.356(m)]
If a system is used for emission control that is maintained at a pressure less than atmospheric pressure with openings to provide dilution air, then the permittee shall maintain records of the monitoring device and records of all periods during which the pressure in the unit is operated at a pressure that is equal to or greater than atmospheric pressure.

xiv. [61.356(n)
The permittee using a total enclosure to comply with control requirements for tanks in 40 CFR 61.343 or the control requirements for containers in 40 CFR 61.345 must keep the records required in paragraphs (n)(1) and (2) of 40 CFR 61.356. The permittee may use records as required in 40 CFR 264.1089(b)(2)(iv) or 40 CFR 265.1090(b)(2)(iv) for a tank or as required in 40 CFR 264.1089(d)(1) or 40 CFR 265.1090(d)(1) for a container to meet the record keeping requirement in 40 CFR 61.356(n)(1). The permittee must make the records of each verification of a total enclosure available for inspection upon request.

(a) [61.356(n)(1)]

Records of the most recent set of calculations and measurements performed to verify that the enclosure meets the criteria of a permanent total enclosure as specified in "Procedure T - Criteria for and Verification of a Permanent or Temporary Total Enclosure" in 40 CFR 52.741, appendix B;

(b) [61.356(n)(2)]
Records required for a closed-vent system and control device according to the requirements in paragraphs (d)(f), and (j) of 40 CFR 61.356.

5. [OAC rule 3745-21-09] Control of volatile organic compounds from stationary sources

a. [OAC rule 3745-21-09(T)] STANDARDS FOR PETROLEUM REFINERY EQUIPMENT LEAKS OF VOCs FROM PUMP SEALS, PIPELINE VALVES, PROCESS DRAINS, COMPRESSOR SEALS AND PRESSURE RELIEF DEVICES

i. [OAC rule 3745-21-09(T)(1)(a)]
Except as otherwise indicated in section A.I.2., a monitoring program shall be developed and implemented which incorporates the following provisions:

(a) Yearly monitoring of all pump seals, pipeline valves in liquid service and process drains in accordance with the method specified in section A.V.;

(b) Quarterly monitoring of all compressor seals, pipeline valves in gas service and pressure relief valves in gas service in accordance with the method specified in section A.V.;

(c) Monthly monitoring of all pump seals by visual methods;

(d) Monitoring of any pump seal in accordance with the method specified in section A.V. within five working days after any liquids are observed dripping from the seal;

(e) Monitoring of any relief valve in accordance with the method specified in section A.V. within five working days after the valve has vented to the atmosphere; and

(f) Monitoring of any component in accordance with the method specified in section A.V. within five working days after the repair of a leak.

ii. [OAC rule 3745-21-09(T)(1)(c)]
For any pipeline or pressure relief valves in gas or liquid service, an alternative monitoring schedule may be employed in lieu of the monitoring schedule specified in OAC rule 3745-21-09(T)(a) as follows:

(a) The valve is designated as difficult to monitor and is monitored each calendar year, provided the following conditions are met:

(i) Construction of the process unit commenced prior to March 27, 1981;

(ii) The permittee of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than six feet above a support surface; and

(iii) The permittee of the valve has a written plan that requires monitoring of the valve at least once per year.

(b) The valve is designated as unsafe to monitor and is monitored as frequently as practical during safe to monitor times, provided the following conditions are met:

(i) The permittee of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of monitoring on a quarterly or yearly basis as specified in OAC rule 3745-21-09(t)(a); and

(ii) The permittee of the valve adheres to a written plan that requires monitoring of the valve as frequently as practical during process unit turnarounds and other safe to monitor times.

iii. [OAC rule 3745-21-09(T)(1)(d)]
All pipeline valves in gas service and pressure relief valves in gas service shall be clearly marked and identified in such a manner that they will be obvious to both refinery personnel performing monitoring and to the Director of Ohio EPA.

iv. [OAC rule 3745-21-09(T)(1)(e)]
If a leak is identified as a result of the monitoring program required by OAC rule 3745-21-09(T)(1) and the concentration of VOC exceeds ten thousand parts per million by volume, a tag shall immediately be placed on the leaking component. The tag shall be readily visible and weatherproof; it shall bear an identification number; and, it shall clearly indicate the date the leak was detected. The tag shall remain in place until the leaking component is repaired.

v. [OAC rule 3745-21-09(T)(1)(f)]
A monitoring log shall be maintained for all leaking components which are tagged in accordance with section A.II.[under OAC rule 3745-21-09(T)]. The monitoring log shall contain, at a minimum, the following data:

(a) The name of the process unit where the leaking component is located;

(b) The type of leaking component (such as valve, seal, or other component);

(c) The tag number of the leaking component;

(d) The date on which the leaking component was detected;

(e) The date on which the leaking component was repaired;

(f) The date and results of the monitoring performed within five working days after the leaking component was repaired;

(g) A record of the calibration of the monitoring instrument;

(h) A list of those leaking components which cannot be repaired until the next process unit turnaround; and

(i) The total number of components monitored and the total number of components found leaking during the calendar year.

vi. [OAC rule 3745-21-09(T)(1)(g)]
A copy of any monitoring log shall be retained by the permittee for a minimum of two years after the date on which the record was made or the report was prepared.

vii. [OAC rule 3745-21-09(T)(1)(h)]
A copy of any monitoring log shall immediately be made available to the director or an authorized representative of the director, upon verbal or written request, at any reasonable time.

viii. [OAC rule 3745-21-09(T)(2)]
The permittee shall repair and retest any leaking component, which is tagged and identified in accordance with OAC rule 3745-21-09(T)(1)(e), as soon as possible, but no later than fifteen days after the leak is found unless the leaking component cannot repaired until a process unit turnaround occurs.

ix. [OAC rule 3745-21-09(T)(4)]
The Director of Ohio EPA may accept an alternative monitoring, record keeping and reporting program for that required by OAC rule 3745-21-09(T)(1) if the permittee can demonstrate to the satisfaction of the Director that the alternative program is at least as effective in identifying, documenting and reporting leaks from petroleum refinery equipment as the program outlined in OAC rule 3745-21-09(T)(1). For purposes of OAC rule 3745-21-09(T)(4), any proposed alternative program which the Director finds

comparable to the requirements of OAC rule 3745-21-09(DD)(12) or (DD)(13) shall be acceptable to the Director.

b. [OAC rule 3745-21-09(M)(3)(b)] - PROCESS UNIT TURNAROUNDS
The permittee shall maintain records for a minimum of two years for each process unit turnaround. Such records shall include:

i. the date the unit was shut down;

ii. the approximate pressure of the vapors in the process vessel when the VOC emissions were first discharged to the ambient air; and

iii. the approximate total quantity of VOC emitted to the ambient air.

c. [OAC rule 3745-21-09(DD)(10)(d)(ii)] Flare Monitoring and Record Keeping Requirements
If a pilot flame is employed, the flame shall be monitored with a thermocouple or any other equivalent device to detect the presence of the pilot flame. The permittee shall maintain records of all periods in which a flame is not present.

If an electric arc ignition system is employed, the arcing shall pulse continually and shall be monitored to detect a failure. The permittee shall maintain records of all periods in which a failure of the electric arc ignition system is detected.

d. [OAC rule 3745-21-07(J)(3)]
The following monitoring and record keeping requirements are required by special order of the Director in the August 19, 1987 Director's Final Findings and Orders. The permittee shall maintain records which provide the following information for each known relief which results in non-smokeless operation of the flare(s):

i. the date, time and duration of the relief;

ii. the flare(s) involved;

iii. the process unit(s) associated with the relief;

iv. the cause of the relief; and,

v. an explanation of why the relief was non-smokeless.

6. OAC rule 3745-14-08 -- NOx Budget Trading Program
Monitoring and reporting.

a. [OAC rule 3745-14-08(A)]
General requirements.

i. [OAC rule 3745-14-08(A)(1)]

The owners and operators, and to the extent applicable, the NOx authorized account representative of a NOx budget unit, shall comply with the monitoring and reporting requirements as provided in this rule and in Subpart H of 40 C.F.R. part 75. For purposes of complying with such requirements, the definitions in paragraph (B) of OAC rule 3745-14-01 and in 40 C.F.R. 72.2 shall apply, and the terms "affected unit," "designated representative," and "continuous emission monitoring system" (or "CEMS") in 40 C.F.R. part 75 shall be replaced by the terms "NOx budget unit," "NOx authorized account representative, " and "continuous emission monitoring system" (or "CEMS"), respectively, as defined in paragraph (B) of OAC rule 3745-14-01 .

ii. [OAC rule 3745-14-08(A)(2)]
The permittee of each NOx budget unit and each unit for which an application for a NOx budget opt-in permit is submitted and not denied or withdrawn, as provided in OAC rule 3745-14-09 shall meet the following requirements:

(a) [OAC rule 3745-14-08(A)(2)(a)]
install all monitoring systems required under this rule for monitoring NOx mass emissions; (This includes all systems required to monitor NOx emission rate, NOx concentration, heat input rate, and stack flow rate, in accordance with 40 C.F.R. 75.71 and 75.72.)

(b) [OAC rule 3745-14-08(A)(2)(b)]
install all monitoring systems for monitoring heat input rate;

(c) [OAC rule 3745-14-08(A)(2)(c)]
successfully complete all certification tests required under paragraph (B) of OAC rule 3745-14-08 and meet all other requirements of OAC rule 3745-14-08 and 40 C.F.R. part 75 applicable to the monitoring systems under paragraphs (A)(2)(a) and (A)(2)(b) of OAC rule 3745-14-08; and

(d) [OAC rule 3745-14-08(A)(2)(d)]
record, report and quality assure the data from the monitoring systems required under paragraphs (A)(2)(a) and (A)(2)(b) of OAC rule 3745-14-08.

iii. [OAC rule 3745-14-08(A)(3)]
The permittee shall meet the certification and other requirements of paragraphs (A)(2)(a) through (A)(2)(c) of OAC rule 3745-14-08 on or before the following dates. The permittee shall record, report and quality-assure the data from the monitoring systems under paragraphs (A)(2)(a) and (A)(2)(b) of OAC rule 3745-14-08 on and after the following dates:

(a) [OAC rule 3745-14-08(A)(3)(a)]

for the permittee of a NOx budget unit for which the permittee intends to apply for early reduction credit under paragraph (D) of OAC rule 3745-14-05by May 1, 2000;

(b) [OAC rule 3745-14-08(A)(3)(b)]
for the permittee of a NOx budget unit under paragraph (C)(1) of OAC rule 3745-14-01 that commences operation before January 1, 2003, and that is not subject to or does not meet the deadline under paragraph (A)(3)(a) of OAC rule 3745-14-08, by May 1, 2003;

(c) [OAC rule 3745-14-08(A)(3)(c)]
for the permittee of a NOx budget unit under paragraph (C)(1)(a) of OAC rule 3745-14-01 that commences operation on or after January 1, 2003 and that reports on an annual basis under paragraph (E)(4) of OAC rule 3745-14-08, by the later of the following dates;

(i) [OAC rule 3745-14-08(A)(3)(c)(i)]
May 1, 2003; or

(ii) [OAC rule 3745-14-08(A)(3)(c)(ii)]
ninety days after the date on which the unit commences commercial operation.

(d) [OAC rule 3745-14-08(A)(3)(d)]
for the permittee of a NOx budget unit under paragraph (C)(1)(a) of OAC rule 3745-14-01 that commences operation on or after January 1, 2003 and that reports on a control period basis under paragraph (E)(4)(b)(i) of OAC rule 3745-14-08, by no later than ninety days after the date on which the unit commences commercial operation, provided that this date is during a control period; (If this date does not occur during a control period, the applicable deadline is May 1 immediately following this date.)

(e) [OAC rule 3745-14-08(A)(3)(e)]
for the permittee of a NOx budget unit under paragraph (C)(1)(b) of OAC rule 3745-14-01 that commences operation on or after January 1, 2003 and that reports on an annual basis under paragraph (E)(4) of OAC rule 3745-14-08, by the later of the following dates:

(i) [OAC rule 3745-14-08(A)(3)(e)(i)]
May 1, 2003; or

(ii) [OAC rule 3745-14-08(A)(3)(e)(ii)]
one hundred and eighty days after the date on which the unit commences operation.

(f) [OAC rule 3745-14-08(A)(3)(f)]

for the permittee of a NOx budget unit under paragraph (C)(1)(b) of OAC rule 3745-14-01 that commences operation on or after January 1, 2003 and that reports on a control period basis under paragraph (E)(4)(b)(ii) of OAC rule 3745-14-08, by one hundred and eighty days after the date on which the unit commences operation, provided that this date is during a control period; (If this date does not occur during a control period, the applicable deadline is May 1 immediately following this date.)

(g) [OAC rule 3745-14-08(A)(3)(g)]
for the permittee of a NOx budget unit that has a new stack or flue for which construction is completed after the applicable deadline under paragraph (A)(3)(a), (A)(3)(b), (A)(3)(c), (A)(3)(d), (A)(3)(e) or (A)(3)(f) of OAC rule 3745-14-08 or rule 3745-14-09 and that reports on an annual basis under paragraph (E)(4) of OAC rule 3745-14-08, by ninety days after the date on which emissions first exit to the atmosphere through the new stack or flue;

(h) [OAC rule 3745-14-08(A)(3)(h)]
for the permittee of a NOx budget unit that has a new stack or flue for which construction is completed after the applicable deadline under paragraph (A)(3)(a), (A)(3)(b), (A)(3)(c), (A)(3)(d), (A)(3)(e) or (A)(3)(f) of OAC rule 3745-14-08 or rule 3745-14-09 and that reports on a control period basis under paragraph (E)(4)(b)(ii) of OAC rule 3745-14-08, by ninety days after the date on which emissions first exit to the atmosphere through the new stack or flue, provided that this date is during a control period; (If this date does not occur during a control period, the applicable deadline is May 1 immediately following this date.)

(i) [OAC rule 3745-14-08(A)(3)(i)]
for the permittee of a unit for which an application for a NOx budget opt-in unit is submitted and not denied or withdrawn, by the date specified under OAC rule 3745-14-09 .

iv. [OAC rule 3745-14-08(A)(4)]
Reporting data prior to initial certification.
The permittee of a NOx budget unit under paragraph (A)(3)(c), (A)(3)(d), (A)(3)(e) or (A)(3)(f) of OAC rule 3745-14-08 shall determine, record and report NOx mass emissions, heat input rate, and any other values required to determine NOx mass emissions (e.g., NOx emission rate and heat input rate, or NOx concentration and stack flow rate) in accordance with 40 C.F.R. 75.70(g), from the date and hour that the unit starts operating until the date and hour on which the continuous emission monitoring system, excepted monitoring system under Appendix D or E of 40 C.F.R. part 75, or excepted monitoring methodology under 40 C.F.R. 75.19, is provisionally certified.

v. [OAC rule 3745-14-08(A)(5)]

Prohibitions.

(a) [OAC rule 3745-14-08(A)(5)(a)]
No permittee of a NOx budget unit shall use any alternative monitoring system, alternative reference method, or any other alternative for the required continuous emission monitoring system without having obtained prior written approval in accordance with paragraph (F) of OAC rule 3745-14-08.

(b) [OAC rule 3745-14-08(A)(5)(b)]
No permittee of a NOx budget unit shall operate the unit so as to discharge, or allow to be discharged, NOx emissions to the atmosphere without accounting for all such emissions in accordance with the applicable provisions of OAC rule 3745-14-08 and 40 C.F.R. part 75 except as provided for in 40 C.F.R. 75.74.

(c) [OAC rule 3745-14-08(A)(5)(c)]
No permittee of a NOx budget unit shall disrupt the continuous emission monitoring system, any portion thereof, or any other approved emission monitoring method, and thereby avoid monitoring and recording NOx mass emissions discharged into the atmosphere, except for periods of recertification or periods when calibration, quality assurance testing, or maintenance is performed in accordance with the applicable provisions of OAC rule 3745-14-08 and 40 C.F.R. part 75 except as provided for in 40 C.F.R. 75.74.

(d) [OAC rule 3745-14-08(A)(5)(d)]
No permittee of a NOx budget unit shall retire or permanently discontinue use of the continuous emission monitoring system, any component thereof, or any other approved emission monitoring system, except under any one of the following circumstances:

(i) [OAC rule 3745-14-08(A)(5)(d)(i)]
during the period that the unit is covered by an exemption under paragraphs (C)(2) and (D) of OAC rule 3745-14-01 that is in effect;

(ii) [OAC rule 3745-14-08(A)(5)(d)(ii)]
the permittee is monitoring emissions from the unit with another certified monitoring system approved by the director, in accordance with the applicable provisions of OAC rule 3745-14-08 and 40 C.F.R. part 75, for use at that unit that provides emission data for the same pollutant or parameter as the retired or discontinued monitoring system; or

(iii) [OAC rule 3745-14-08(A)(5)(d)(iii)]

the NOx authorized account representative submits notification of the date of certification testing of a replacement monitoring system for the retired or discontinued monitoring system in accordance with paragraph (B)(2)(b) of OAC rule 3745-14-08.

b. [OAC rule 3745-14-08(B)]
Initial certification and recertification procedures.

i. [OAC rule 3745-14-08(B)(1)]
The permittee of a NOx budget unit that is subject to an Acid Rain emissions limitation shall comply with the initial certification and recertification procedures of 40 C.F.R. part 75, except that:

(a) [OAC rule 3745-14-08(B)(1)(a)]
if, prior to January 1, 1998, the Administrator approved a petition under 40 C.F.R. 75.17(a) or (b) for apportioning the NOx emission rate measured in a common stack or a petition under 40 C.F.R. 75.66 for an alternative to a requirement in 40 C.F.R. 75.17, the NOx authorized account representative shall resubmit the petition, under paragraph (F)(1) of OAC rule 3745-14-08, to the Administrator to determine if the approval applies under the NOx budget trading program;

(b) [OAC rule 3745-14-08(B)(1)(b)]
for any additional CEMS required under the common stack provisions in 40 C.F.R. 75.72, or for any NOx concentration CEMS used under the provisions of 40 C.F.R. 75.71(a)(2), the permittee shall meet the requirements of paragraph (B)(2) of OAC rule 3745-14-08.

ii. [OAC rule 3745-14-08(B)(2)]
The permittee of a NOx budget unit that is not subject to an Acid Rain emissions limitation shall comply with the following initial certification and recertification procedures. The permittee of such a unit that qualifies to use the low mass emissions excepted monitoring methodology under 40 C.F.R. 75.19 or that qualifies to use an alternative monitoring system under subpart E of 40 C.F.R. part 75 shall comply with the following procedures, as modified by paragraph (B)(3) or (B)(4) of OAC rule 3745-14-08. The permittee of a NOx budget unit that is subject to an acid rain emissions limitation and that requires additional CEMS under the common stack provisions in 40 C.F.R. 75.72 or uses a NOx concentration CEMS under 40 C.F.R. 75.71(a)(2) shall comply with the following procedures.

(a) [OAC rule 3745-14-08(B)(2)(a)]
The permittee shall ensure that each monitoring system required by Subpart H of 40 C.F.R. part 75 (which includes the automated data acquisition and handling system) successfully completes all of the initial certification testing required under 40 C.F.R. 75.20 by the applicable deadline in paragraph (A)(3) of OAC rule 3745-14-08. In

addition, whenever the permittee installs a monitoring system in order to meet the requirements OAC rule 3745-14 in a location where no such monitoring system was previously installed, initial certification according to 40 C.F.R. 75.20 is required.

(b) [OAC rule 3745-14-08(B)(2)(b)]
Whenever the permittee makes a replacement, modification, or change in a certified monitoring system that may significantly affect the ability of the system to accurately measure or record NOx mass emissions or heat input rate or to meet the requirements of 40 C.F.R. 75.21 or Appendix B to 40 C.F.R. part 75, the permittee shall recertify the monitoring system in accordance with 40 C.F.R. 75.20(b). Furthermore, whenever the permittee makes a replacement, modification, or change to the flue gas handling system or the unit's operation that may significantly change the stack flow or concentration profile, the permittee shall recertify the continuous emissions monitoring system in accordance with 40 C.F.R. 75.20(b). Examples of changes that require recertification include: replacement of the analyzer, complete replacement of an existing continuous emission monitoring system, or change in location or orientation of the sampling probe or site.

(c) [OAC rule 3745-14-08(B)(2)(c)]
Certification approval process for initial certifications and recertification.

(i) [OAC rule 3745-14-08(B)(2)(c)(i)]
The NOx authorized account representative shall submit to the Administrator, the U.S. EPA Region 5 office, and the director a written notice of the dates of certification in accordance with paragraph (D) of OAC rule 3745-14-08.

(ii) [OAC rule 3745-14-08(B)(2)(c)(ii)]
The NOx authorized account representative shall submit to the Administrator, the U.S. EPA Region 5 office, and director a certification application for each monitoring system required under Subpart H of 40 C.F.R. part 75. A complete certification application shall include the information specified in Subpart H of 40 C.F.R. part 75.

(iii) [OAC rule 3745-14-08(B)(2)(c)(iii)]
Except for units using the low mass emission excepted methodology under 40 C.F.R. 75.19, the provisional certification date for a monitor shall be determined in accordance with 40 C.F.R. 75.20(a)(3). A provisionally certified monitor may be used under the NOx budget trading program for a period not to exceed one hundred twenty days

after receipt by the director of the complete certification application for the monitoring system or component thereof under paragraph (B)(2)(c)(ii) of OAC rule 3745-14-08. Data measured and recorded by the provisionally certified monitoring system or component thereof, in accordance with the requirements of 40 C.F.R. part 75, shall be considered valid quality-assured data (retroactive to the date and time of provisional certification), provided that the director does not invalidate the provisional certification by issuing a notice of disapproval within one hundred twenty days of receipt of the complete certification application by the director.

(iv) [OAC rule 3745-14-08(B)(2)(c)(iv)]
The director shall issue a written notice of approval or disapproval of the certification application to the permittee within one hundred twenty days of receipt of the complete certification application under paragraph (B)(2)(c)(ii) of OAC rule 3745-14-08. In the event the director does not issue such a notice within such one-hundred-twenty-day period, each monitoring system that meets the applicable performance requirements of 40 C.F.R. part 75 and is included in the certification application shall be deemed certified for use under the NOx budget trading program.

(aa) [OAC rule 3745-14-08(B)(2)(c)(iv)(a)]]
If the certification application is complete and shows that each monitoring system meets the applicable performance requirements of 40 C.F.R. part 75, then the director shall issue a written notice of approval of the certification application within one hundred twenty days of receipt.

(bb) [OAC rule 3745-14-08(B)(2)(c)(iv)(b)]
A certification application shall be considered complete when all of the applicable information required to be submitted under paragraph (B)(2)(c)(ii) of OAC rule 3745-14-08 has been received by the director. If the certification application is not complete, then the director shall issue a written notice of incompleteness that sets a reasonable date by which the NOx authorized account representative shall submit the additional information required to complete the certification application. If the NOx authorized account representative does not comply with the notice of incompleteness by the specified date, then the director may issue a notice of disapproval under paragraph (B)(2)(c)(iv)(c) of OAC rule 3745-14-08. The

one-hundred-twenty-day review period shall not begin prior to receipt of a complete certification application.

(cc) [OAC rule 3745-14-08(B)(2)(c)(iv)(c)]
If the certification application shows that any monitoring system or component thereof does not meet the performance requirements OAC rule 3745-14, or if the certification application is incomplete and the requirement for disapproval under paragraph (B)(2)(c)(iv)(b) of OAC rule 3745-14-08 has been met, then the director shall issue a written notice of disapproval of the certification application. Upon issuance of such notice of disapproval, the provisional certification is invalidated by the director and the data measured and recorded by each uncertified monitoring system or component thereof shall not be considered valid quality-assured data beginning with the date and hour of provisional certification [as defined under 40 C.F.R. 75.20(a)(3)]. The permittee shall follow the procedures for loss of certification in paragraph (B)(2)(c)(v) of OAC rule 3745-14-08 for each monitoring system or component thereof which is disapproved for initial certification.

(dd) [OAC rule 3745-14-08(B)(2)(c)(iv)(d)]
The director may issue a notice of disapproval of the certification status of a monitor in accordance with paragraph (C)(2) of OAC rule 3745-14-08.

(v) [OAC rule 3745-14-08(B)(2)(c)(v)]
If the director issues a notice of disapproval of a certification application under paragraph (B)(2)(c)(iv)(c) of OAC rule 3745-14-08 or a notice of disapproval of certification status under paragraph (B)(2)(c)(iv)(d) of OAC rule 3745-14-08, then:

(aa) [OAC rule 3745-14-08(B)(2)(c)(v)(a)]
the permittee shall substitute the following values, for each hour of unit operation during the period of invalid data specified under 40 C.F.R. 75.20(a)(4)(iii), 40 C.F.R. 75.20(b)(5), 40 C.F.R. 75.20(h)(4) or 40 C.F.R. 75.21(e) and continuing until the date and hour specified under 40 C.F.R. 75.20(a)(5)(i):

[aaa] [OAC rule 3745-14-08(B)(2)(c)(v)(a)(i)]
for units that the permittee intends to monitor or monitors for NOx emission rate and heat input or intends to determine or determines NOx mass

emissions using the low mass emission excepted methodology under 40 C.F.R. 75.19, the maximum potential NOx emission rate and the maximum potential hourly heat input of the unit;

(bbb) [OAC rule 3745-14-08(B)(2)(c)(v)(a)(ii)]
for units that the permittee intends to monitor or monitors for NOx mass emissions using a NOx pollutant concentration monitor and a flow monitor, the maximum potential concentration of NOx and the maximum potential flow rate of the unit under section 2 of Appendix A of 40 C.F.R. part 75.

(bb) [OAC rule 3745-14-08(B)(2)(c)(v)(b)]
the NOx authorized account representative shall submit a notification of certification retest dates and a new certification application in accordance with paragraphs (B)(2)(c)(i) and (B)(2)(c)(ii) of OAC rule 3745-14-08;

(cc) [OAC rule 3745-14-08(B)(2)(c)(v)(c)]
the permittee shall repeat all certification tests or other requirements that were failed by the monitoring system, as indicated in the director's notice of disapproval, no later than thirty unit operating days after the date of issuance of the notice of disapproval.

iii. [OAC rule 3745-14-08(B)(3)]
The permittee of a gas fired or oil fired unit using the low mass emissions excepted methodology under 40 C.F.R. 75.19 and not subject to an Acid Rain emission limitation shall meet the applicable general operating requirements of 40 C.F.R. 75.10 and the applicable requirements of 40 C.F.R. 75.19. The permittee of such a unit shall also meet the applicable certification and recertification procedures of paragraph (B)(2) of OAC rule 3745-14-08, except that the excepted methodology shall be deemed provisionally certified for use under the NOx budget trading program as of the following dates:

(a) [OAC rule 3745-14-08(B)(3)(a)]
for a unit that does not have monitoring equipment initially certified or recertified for the NOx budget trading program as of the date on which the NOx authorized account representative submits the certification application under 40 C.F.R. 75.19 for the unit, starting on the date of such submissions until the completion of the period for the director's review;

(b) [OAC rule 3745-14-08(B)(3)(b)]

for a unit that has monitoring equipment initially certified or recertified for the NOx budget trading program as of the date on which the NOx authorized account representative submits the certification application under 40 C.F.R. 75.19 for the unit and that reports data on an annual basis under paragraph (E)(4) of OAC rule 3745-14-08, starting January 1 of the year after the year of such submission until the completion of the period for the director' review;

(c) [OAC rule 3745-14-08(B)(3)(c)]
for a unit that has monitoring equipment initially certified or recertified for the NOx budget trading program as of the date on which the NOx authorized account representative submits the certification application under 40 C.F.R. 75.19 for the unit and that reports on a control period basis under paragraph (E)(4) of OAC rule 3745-14-08, starting May 1 of the control period after the year of such submission until the completion of the period for the director's review.

iv. [OAC rule 3745-14-08(B)(4)]
The NOx authorized account representative of each unit not subject to an Acid Rain emissions limitation for which the permittee intends to use an alternative monitoring system approved by the Administrator under subpart E of 40 C.F.R. part 75, shall comply with the applicable certification procedures in paragraph (B)(2) of OAC rule 3745-14-08 before using the system under the NOx budget trading program. The NOx authorized account representative shall also comply with the applicable recertification procedures in paragraph (B)(2)(c) of OAC rule 3745-14-08. The requirements of 40 C.F.R. 75.20(f) shall apply to such alternative monitoring system.

c. [OAC rule 3745-14-08(C)]
Out of control periods.

i. [OAC rule 3745-14-08(C)(1)]
Whenever any monitoring system fails to meet the quality assurance or data validation requirements of 40 C.F.R. part 75, data shall be substituted using the applicable procedures in subpart D, Appendix D, or Appendix E of 40 C.F.R. part 75.

ii. [OAC rule 3745-14-08(C)(2)]
Whenever both an audit of a monitoring system and a review of the initial certification or recertification application reveal that any system or component should not have been certified or recertified because it did not meet a particular performance specification or other requirement under paragraph (B) of OAC rule 3745-14-08 or the applicable provisions of 40 C.F.R. part 75, both at the time of the initial certification or recertification application submission and at the time of the audit, the director shall issue a notice of disapproval of the certification status of such system or component. For the purposes of this paragraph, an audit shall be either a field audit or an audit of

any information submitted to the director or the Administrator. By issuing the notice of disapproval, the director revokes prospectively the certification status of the system or component. The data measured and recorded by the system or component shall not be considered valid quality-assured data from the date of issuance of the notification of the revoked certification status until the date and time that the permittee completes subsequently approved initial certification or recertification tests for the system or component.

d. [OAC rule 3745-14-08(D)]
The NOx authorized account representative for a NOx budget unit shall submit written notice of certification and recertification test dates to the director and the Administrator in accordance with 40 C.F.R. 75.61, except that if a unit is not subject to an Acid Rain emission limitation, notification is only required to be sent to the director.

e. [OAC rule 3745-14-08(E)]
Record keeping and reporting.

i. [OAC rule 3745-14-08(E)(1)]
General provisions

(a) [OAC rule 3745-14-08(E)(1)(a)]
The NOx authorized account representative shall comply with all record keeping and reporting requirements in this rule and with the requirements of paragraph (A)(5) of OAC rule 3745-14-02.

## IV. Reporting Requirements

1. 40 CFR Part 63, Subpart CC

a. [63.654] Reporting Requirements

i. [63.654(d)]
The permittee shall comply with the record keeping and reporting provisions in paragraphs (d)(1) through (d)(6) of 40 CFR 63.654.

(a) [63.654(d)(1)]
Sections 60.486 and 60.487 of Subpart VV of part 60 except as specified in 40 CFR 63.654(d)(1)(i); or 40 CFR 63.181 and 63.182 of Subpart H of 40 CFR Part 63 except for 40 CFR 63.182(b), (c)(2), and (c)(4).

(i) [63.654(d)(1)(i)]
The signature of the permittee (or designate) whose decision it was that a repair could not be effected without a process shutdown is not required to be recorded. Instead, the name of the person whose decision it was that a repair could not be

effected without a process shutdown shall be recorded and retained for 2 years.

(b) [63.654(d)(2)]
The Notification of Compliance Status report required by 40 CFR 63.182(c) of Subpart H and the initial semiannual report required by 40 CFR 60.487(b) of 40 CFR part 60, Subpart VV shall be submitted within 150 days of the compliance date specified in 40 CFR 63.640(h); the requirements of Subpart H of 40 CFR Part 63 are summarized in table 3 of 40 CFR Part 63, Subpart CC [See section A.VI].

(c) [63.654(d)(3)]
The permittee who determines that a compressor qualifies for the hydrogen service exemption in 40 CFR 63.648 shall also keep a record of the demonstration required by 40 CFR 63.648.

(d) [63.654(d)(4)]
The permittee must keep a list of identification numbers for valves that are designated as leakless per 40 CFR 63.648(c)(10).

(e) [63.654(d)(5)]
The permittee must identify, either by list or location (area or refining process unit), equipment in organic HAP service less than 300 hours per year within refining process units subject to 40 CFR Part 63, Subpart CC.

(f) [63.654(d)(6)]
The permittee must keep a list of reciprocating pumps and compressors determined to be exempt from seal requirements as per 40 CFR 63.648(f) and (i).

ii. [63.654(g)] Periodic Reports
The permittee shall submit Periodic Reports no later than 60 days after the end of each 6-month period when any of the compliance exceptions specified in 40 CFR 63.654(a) occur. The first 6-month period shall begin on the date the Notification of Compliance Status report is required to be submitted. A Periodic Report is not required if none of the compliance exceptions specified in 40 CFR 63.654(a) occurred during the 6-month period unless emissions averaging is utilized. A permittee may submit reports required by other regulations in place of or as part of the Periodic Report required by this paragraph if the reports contain the information required by 40 CFR 63.654(a).

(a) [63.654(g)(6)]
For miscellaneous process vents for which continuous parameter monitors are required by 40 CFR Part 63, Subpart CC, periods of

excess emissions shall be identified in the Periodic Reports and shall be used to determine compliance with the emission standards.

(i) [63.654(g)(6)(i)]
Period of excess emission means any of the following conditions:

(aa) [63.654(g)(6)(i)(A)]
An operating day when the daily average value of a monitored parameter, except presence of a flare pilot flame, is outside the range specified in the Notification of Compliance Status report. Monitoring data recorded during periods of monitoring system breakdown, repairs, calibration checks and zero (low-level) and high-level adjustments shall not be used in computing daily average values of monitored parameters.

(bb) [63.654(g)(6)(i)(B)]
An operating day when all pilot flames of a flare are absent.

(cc) [63.654(g)(6)(i)(C)]
An operating day when monitoring data required to be recorded in paragraphs (i)(3) (i) and (ii) of 40 CFR 63.654 are available for less than 75 percent of the operating hours.

(dd) [63.654(g)(6)(i)(D)]
For data compression systems approved under 40 CFR 63.654(h)(5)(iii), an operating day when the monitor operated for less than 75 percent of the operating hours or a day when less than 18 monitoring values were recorded.

(ii) [63.654(g)(6)(ii)]
For miscellaneous process vents, excess emissions shall be reported for the operating parameters specified in table 10 of 40 CFR Part 63, Subpart CC, [See section A.IV.] unless other site-specific parameter(s) have been approved by the operating permit authority.

(iii) [63.654(g)(6)(iii)]
Periods of startup, shutdown, and malfunction that meet the definitions found in 40 CFR 63.641 and 40 CFR 63.2 of 40 CFR Part 63, Subpart A and periods of performance testing and monitoring system calibration shall not be considered periods

of excess emissions. Malfunctions may include process unit, control device, or monitoring system malfunctions.

(b) [63.654(g)(7)]
If a performance test for determination of compliance for a new emission point subject to 40 CFR Part 63, Subpart CC or for an emission point that has changed from Group 2 to Group 1 is conducted during the period covered by a Periodic Report, the results of the performance test shall be included in the Periodic Report.

(i) [63.654(g)(7)(i)]
Results of the performance test shall include the percentage of emissions reduction or outlet pollutant concentration reduction (whichever is needed to determine compliance) and the values of the monitored operating parameters.

(ii) [63.654(g)(7)(ii)]
The complete test report shall be maintained on site.

iii. [40 CFR 63.654(h)(1)]
Reports of startup, shutdown, and malfunction required by 40 CFR 63.10(d)(5). Records and reports of startup, shutdown, and malfunction are not required if they pertain solely to Group 2 emission points, as defined in 40 CFR 63.641, that are not included in an emissions average. For purposes of this paragraph, startup and shutdown shall have the meaning defined in 40 CFR 63.641, and malfunction shall have the meaning defined in 40 CFR 63.2.

iv. [63.645(h)(2)]
Where the recalculated TOC emission rate under 40 CFR 63.645(h) [See section A.III] is greater than 33 kilograms per day for an existing source or greater than 6.8 kilograms per day for a new source, the permittee shall submit a report as specified in 40 CFR 63.654(f), (g), or (h) [See section A.IV] and shall comply with the appropriate provisions in 40 CFR 63.643 [See section A.II] by the dates specified in 40 CFR 63.640 [See section A.I].

v. [63.654(h)(4)]
The permittee who requests approval to monitor a different parameter than those listed in 40 CFR 63.644 for miscellaneous process vents or who is required by 40 CFR 63.653(a)(8) to establish a site-specific monitoring parameter for a point in an emissions average shall submit the information specified in paragraphs 40 CFR 63.654(h)(4)(i) through (h)(4)(iii) [See section A.IV.]. For new or reconstructed sources, the information shall be submitted with the application for approval of construction or reconstruction required by 40 CFR 63.5(d) and for existing sources, and the information shall be submitted no later than 18 months prior to the compliance date. The information may be submitted in an operating permit application, in an amendment to an operating permit application, or in a separate submittal.

(a) [40 CFR 63.654(h)(4)(i)]
A description of the parameter(s) to be monitored to determine whether excess emissions occur and an explanation of the criteria used to select the parameter(s).

(b) [40 CFR 63.654(h)(4)(ii)]
A description of the methods and procedures that will be used to demonstrate that the parameter can be used to determine excess emissions and the schedule for this demonstration. The permittee must certify that they will establish a range for the monitored parameter as part of the Notification of Compliance Status report required in 40 CFR 63.654(e) and (f).

(c) [40 CFR 63.654(h)(4)(iii)]
The frequency and content of monitoring, recording, and reporting if: monitoring and recording are not continuous; or if periods of excess emissions, as defined in 63.654(g)(6) [See section A.III.], will not be identified in Periodic Reports required under 63.654 (e) and (g) [See section A.IV.]. The rationale for the proposed monitoring, recording, and reporting system shall be included.

vi. [63.654(h)(6)]
The permittee shall submit the information specified in 63.654 (h)(6)(i) through (h)(6)(iii) [See section A.IV], as applicable. For existing sources, this information shall be submitted in the initial Notification of Compliance Status report. For a new source, the information shall be submitted with the application for approval of construction or reconstruction required by 40 CFR 63.5(d) of Subpart A. The information may be submitted in an operating permit application, in an amendment to an operating permit application, or in a separate submittal.

(a) [63.654(h)(6)(i)]
The determination of applicability of 40 CFR Part 63, Subpart CC to petroleum refining process units that are designed and operated as flexible operation units.

(b) [63.654(h)(ii)]
The determination of applicability of 40 CFR Part 63, Subpart CC to any storage vessel for which use varies from year to year.

(c) [63.654(h)(iii)]
The determination of applicability of 40 CFR Part 63, Subpart CC to any distillation unit for which use varies from year to year.

b. [40 CFR Part 63, Subpart CC, Table 10] MISCELLANEOUS PROCESS VENTS REPORTING REQUIREMENTS FOR COMPLYING WITH 98 WEIGHT-

PERCENT OF TOTAL ORGANIC HAP EMISSIONS OF 20 PARTS PER MILLION BY VOLUME

i. Thermal Incinerator
Report in the Periodic Report all daily average temperatures that are outside the range established in the Notification of Compliance Status or operating permit and all operating days when insufficient monitoring data are collected. [When a period of excess emission is caused by insufficient monitoring data, as described in 40 CFR 63.654(g)(6)(i) (C) or (D) [See section A.III], the duration of the period when monitoring data were not collected shall be included in the Periodic Report.]

ii. Catalytic Incinerator

(a) Report in the Periodic Report all daily average upstream temperatures that are outside the range established in the Notification of Compliance Status or operating permit.

(b) Report in the Periodic Report all daily average temperature differences across the catalyst bed that are outside the range established in the Notification of Compliance Status or operating permit.

(c) Report all operating days when insufficient monitoring data are collected. [When a period of excess emission is caused by insufficient monitoring data, as described in 40 CFR 63.654(g)(6)(i) (C) or (D), the duration of the period when monitoring data were not collected shall be included in the Periodic Report.]

iii. Boiler or process heater with a design heat capacity less than 44 megawatts where the vent stream is not introduced into the flame zone.
Report in the Periodic Report all daily average firebox temperatures that are outside the range established in the NCS or operating permit and all operating days when insufficient monitoring data are collected. No monitoring is required for boilers and process heaters with a design heat capacity > 44 megawatts or for boilers and process heaters where all vent streams are introduced into the flame zone. No record keeping or reporting associated with monitoring is required for such boilers and process heaters.

iv. FLARE
Report the times and durations of all periods when all pilot flames for a flare are absent or the monitor is not operating.

v. All Control Devices
Monitor the presence of flow diverted to the atmosphere from the control device (40 CFR 63.644(c)(1) [See section A.III.]) or monthly inspections of sealed valves (40 CFR 63.644 (c)(2) [See section A.III.]). For presence of flow diverted to atmosphere, report the times and durations of all periods when the

vent stream is diverted through a bypass line or the monitor is not operating. For monthly inspection of sealed valves, report all monthly inspections that show the valves are not closed or the seal has been changed.

2. [60.487] REPORTING REQUIREMENTS, EQUIPMENT LEAKS - 40 CFR Part 60, Subpart VV

a. [60.487(a)]
Each permittee subject to the provisions of 40 CFR Part 60, Subpart VV shall submit semiannual reports to the Administrator beginning six months after the initial start-up date.

b. [60.487(c)]
All semiannual reports to the Administrator shall include the following information, summarized from the information in 60.486 [See section A.III.]:

i. [60.487(c)(1)]
Process unit identification.

ii. [60.487(c)(2)]
For each month during the semiannual reporting period:

(a) [60.487(c)(2)(i)]
number of valves for which leaks were detected as described in 60.482(7)(b) [See section A.II.];

(b) [60.487(c)(2)(ii)]
number of valves for which leaks were not repaired as required in paragraph 60.482-7(d)(1) [See section A.II.];

(c) [60.487(c)(2)(iii)]
number of pumps for which leaks were detected as described in 60.482-2(b) and (d)(6)(i) [See section A.II.];

(d) [60.487(c)(2)(iv)]
number of pumps for which leaks were not repaired as required in 60.482-2(c)(1) and (d)(6)(ii) [See section A.II.];

(e) [60.487(c)(2)(v)]
number of compressors for which leaks were detected as described in 60.482-3(f) [See section A.II.];

(f) [60.487(c)(2)(vi)]
number of compressors for which leaks were not repaired as required in 60.482-3(g)(1) [See section A.II.]; and

(g) [60.487(c)(2)(vii)]

the facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible.

iii. [60.487(c)(3)]
Dates of process unit shutdowns which occurred within the semiannual reporting period.

iv. [60.487(c)(4)]
Revisions to items reported according to 40 CFR 60.487(b) if changes have occurred since the initial report or subsequent revisions to the initial report.

c. [60.487(d)]
The permittee electing to comply with the provisions of 40 CFR 60.483-1 and 60.483-2 shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions.

d. [60.487(e)]
The permittee shall report the results of all performance tests in accordance with 40 CFR 60.8 of the General Provisions. The provisions of 40 CFR 60.8(d) do not apply to affected facilities subject to the provisions of 40 CFR Part 60, Subpart VV except that the permittee must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests.

e. [60.487(f)]

The requirements of paragraphs (a) through (c) of 40 CFR 60.487 remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of paragraphs (a) through (c) of 40 CFR 60.487, provided that they comply with the requirements established by the State.

3. 40 CFR Part 63, Subpart H - National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks

a. 40 CFR 63.182 Reporting requirements.

i. [63.182(a)]
Each permittee of a source subject to 40 CFR Part 63, Subpart H shall submit the reports listed in paragraphs (a)(1) through (a)(5) of 40 CFR 63.182. Permittees requesting an extension of compliance shall also submit the report listed in paragraph (a)(6) of 40 CFR 63.182.

(a) [63.182(a)(1)]
An Initial Notification described in paragraph (b) of 40 CFR 63.182, and

(b) [63.182(a)(2)]
A Notification of Compliance Status described in paragraph (c) of 40 CFR 63.182,

(c) [63.182(a)(3)]
Periodic Reports described in paragraph (d) of 40 CFR 63.182, and

(d) [63.182(a)(6)]
Pursuant to section 112(i)(3)(B) of the Act, the permittee may request an extension allowing an existing source up to 1 additional year beyond the compliance date specified in the subpart that references 40 CFR Part 63, Subpart H.

(i) [63.182(a)(6)(i)]
For purposes of 40 CFR Part 63, Subpart H, a request for an extension shall be submitted to the operating permit authority as part of the operating permit application. If the State in which the source is located does not have an approved operating permit program, a request for an extension shall be submitted to the Administrator as a separate submittal. The dates specified in 40 CFR 63.6(i) of Subpart A of 40 CFR Part 63 for submittal of requests for extensions shall not apply to sources subject to 40 CFR Part 63, Subpart H.

(ii) [63.182(a)(6)(ii)]
A request for an extension of compliance must include the data described in 40 CFR 63.6(i)(6)(i)(A), (B), and (D) of Subpart A of 40 CFR Part 63.

(iii) [63.182(a)(6)(iii)]
The requirements in 40 CFR 63.6(i)(8) through (i)(14) of Subpart A of 40 CFR Part 63 will govern the review and approval of requests for extensions of compliance with 40 CFR Part 63, Subpart H.

ii. [63.182(c) & Table 3 of 40 CFR Part 63, Subpart CC ]
Each permittee of a source subject to 40 CFR Part 63, Subpart H shall submit a Notification of Compliance Status within 150 days of the compliance dates specified in the subpart in 40 CFR Part 63 that references 40 CFR Part 63, Subpart H, except as provided in paragraph (c)(4) of 40 CFR 63.182.

(a) [63.182(c)(1)]
The notification shall provide the information listed in paragraphs (c)(1)(i) through (c)(1)(iv) of 40 CFR 63.182 for each process unit subject to the requirements of 40 CFR 63.163 through 40 CFR 63.174 [See section A.II].

(i) [63.182(c)(1)(i)]
Process unit identification.

(ii) [63.182(c)(1)(ii)]
Number of each equipment type (e.g., valves, pumps) excluding equipment in vacuum service.

(iii) [63.182(c)(1)(iii)]
Method of compliance with the standard (for example, "monthly leak detection and repair" or "equipped with dual mechanical seals").

(iv) [63.182(c)(1)(iv)]
Planned schedule for each phase of the requirements in 40 CFR 63.163 and 40 CFR 63.168.

(b) [63.182(c)(2)]
The notification shall provide the information listed in paragraphs (c)(2)(i) and (c)(2)(ii) of 40 CFR 63.182for each process unit subject to the requirements of 40 CFR 63.178(b) [See section A.II].

(i) [63.182(c)(2)(i)]
Batch products or product codes subject to the provisions of 40 CFR Part 63, Subpart H, and

(ii) [63.182(c)(2)(ii)]
Planned schedule for pressure testing when equipment is configured for production of products subject to the provisions of 40 CFR Part 63, Subpart H.

(c) [63.182(c)(3)]
The notification shall provide the information listed in paragraphs (c)(3)(i) and (c)(3)(ii) of 40 CFR 63.182for each process unit subject to the requirements in 40 CFR 63.179 [See section A.II].

(i) [63.182(c)(3)(i)]
Process unit identification.

(ii) [63.182(c)(3)(ii)]
A description of the system used to create a negative pressure in the enclosure and the control device used to comply with the requirements of 40 CFR 63.172 [See section A.II].

(d) [63.182(c)(4) & Table 3 of 40 CFR Part 63, Subpart CC]
For existing sources subject to Subpart F of 40 CFR Part 63, the Notification of Compliance Status shall be submitted for the group of process units with the earliest compliance date specified in 40 CFR

63.100(k) of Subpart F of 40 CFR Part 63, by no later than 150 days after the compliance date for that group. The Notification of Compliance Status for each subsequent group shall be submitted as part of the first periodic report that is due not less than 150 days after the compliance date for that group.

iii. [63.182(d)]
The permittee of a source subject to 40 CFR Part 63, Subpart H shall submit Periodic Reports.

(a) [63.182(d)(1)]
A report containing the information in paragraphs (d)(2), (d)(3), and (d)(4) of 40 CFR 63.182 shall be submitted semiannually starting 6 months after the Notification of Compliance Status, as required in paragraph (c) of 40 CFR 63.182. The first periodic report shall cover the first 6 months after the compliance date specified in 40 CFR 63.100(k)(3) of Subpart F. Each subsequent periodic report shall cover the 6 month period following the preceding period.

(b) [63.182(d)(2)]
For each process unit complying with the provisions of 40 CFR 63.163 through 40 CFR 63.174 [See section A.II], the summary information listed in paragraphs (i) through (xvi) of this paragraph for each monitoring period during the 6-month period.

(i) [63.182(d)(2)(i)]
The number of valves for which leaks were detected as described in 40 CFR 63.168(b), the percent leakers, and the total number of valves monitored;

(ii) [63.182(d)(2)(ii)]
The number of valves for which leaks were not repaired as required in 40 CFR 63.168(f), identifying the number of those that are determined nonrepairable;

(iii) [63.182(d)(2)(iii)]
The number of pumps for which leaks were detected as described in 40 CFR 63.163(b), the percent leakers, and the total number of pumps monitored;

(iv) [63.182(d)(2)(iv)]
The number of pumps for which leaks were not repaired as required in 40 CFR 63.163(c);

(v) [63.182(d)(2)(v)]
The number of compressors for which leaks were detected as described in 40 CFR 63.164(f);

(vi) [63.182(d)(2)(vi)]
The number of compressors for which leaks were not repaired as required in 40 CFR 63.164(g);

(vii) [63.182(d)(2)(ix)]
The number of connectors for which leaks were detected as described in 40 CFR 63.174(a), the percent of connectors leaking, and the total number of connectors monitored;

(viii) [63.182(d)(2)(xi)]
The number of connectors for which leaks were not repaired as required in 40 CFR 63.174(d), identifying the number of those that are determined nonrepairable;

(ix) [63.182(d)(2)(xiii)]
The facts that explain any delay of repairs and, where appropriate, why a process unit shutdown was technically infeasible.

(x) [63.182(d)(2)(xiv)]
The results of all monitoring to show compliance with 40 CFR 63.164(i), 63.165(a), and 63.172(f) conducted within the semiannual reporting period.

(xi) [63.182(d)(2)(xv)]
If applicable, the initiation of a monthly monitoring program under 40 CFR 63.168(d)(1)(i), or a quality improvement program under either 40 CFR 63.175 or 63.176.

(xii) [63.182(d)(2)(xvi)]
If applicable, notification of a change in connector monitoring alternatives as described in 40 CFR 63.174(c)(1).

(xiii) [63.182(d)(2)(xvii)]
If applicable, the compliance option that has been selected under 40 CFR 63.172(n).

(c) [63.182(d)(4)]
The information listed in paragraph (c) of 40 CFR 63.182 for the Notification of Compliance Status for process units with later compliance dates. Any revisions to items reported in earlier Notification of Compliance Status, if the method of compliance has changed since the last report.

4. [61.357] REPORTING REQUIREMENTS - 40 CFR Part 61, Subpart FF - National Emission Standard for Benzene Waste Operations

a. [61.357(a)]
The permittee shall submit to the Administrator by the initial startup for a new source, a report that summarizes the regulatory status of each waste stream subject to 40 CFR 61.342 [See section A.II.] and is determined by the procedures specified in 40 CFR 61.355(c) [See section A.V.] to contain benzene. The report shall include the following information:

i. [61.357(a)(1)]
Total annual benzene quantity from facility waste determined in accordance with 40 CFR 61.355(a) [See section A.V.].

ii. [61.357(a)(2)]
A table identifying each waste stream and whether or not the waste stream will be controlled for benzene emissions in accordance with the requirements 40 CFR Part 61, Subpart FF.

iii. [61.357(a)(3)]
For each waste stream identified as not being controlled for benzene emissions in accordance with the requirements of 40 CFR Part 61, Subpart FF, the following information shall be added to the table:

(a) [61.357(a)(3)(i)]
Whether or not the water content of the waste stream is greater than 10 percent;

(b) [61.357(a)(3)(ii)]
Whether or not the waste stream is a process wastewater stream, product tank drawdown, or landfill leachate;

(c) [61.357(a)(3)(iii)]
Annual waste quantity for the waste stream;

(d) [61.357(a)(3)(iv)]
Range of benzene concentrations for the waste stream;

(e) [61.357(a)(3)(v)]
Annual average flow-weighted benzene concentration for the waste stream; and

(f) [61.357(a)(3)(vi)]
Annual benzene quantity for the waste stream.

iv. [61.357(a)(4)]
The information required in paragraphs 40 CFR 61.357(a)(1), (2), and (3) should represent the waste stream characteristics based on current configuration and operating conditions. The permittee only needs to list in the report those waste streams that contact materials containing benzene. The report does not need to include a description of the controls to be installed to comply with the standard or other information required in 40 CFR 61.10(a) of Subpart A.

b. [61.357(b)]

If the total annual benzene quantity from facility waste is less than 1 Mg/yr (1.1 ton/yr), then the permittee shall submit a report to the Administrator a report that updates the information listed in paragraphs (a)(1) through (a)(3) of 40 CFR 61.357 whenever there is a change in the process generating the waste stream that could cause the total annual benzene quantity from facility waste to increase to 1 Mg/yr (1.1 ton/yr) or more.

c. [61.357(c)]
If the total annual benzene quantity from facility waste is less than 10 Mg/yr (11 ton/yr) but is equal to or greater than 1 Mg/yr (1.1 ton/yr), then the permittee shall submit to the Administrator a report that updates the information listed in paragraphs (a)(1) through (a)(3) of 40 CFR 61.357. The report shall be submitted annually and whenever there is a change in the process generating the waste stream that could cause the total annual benzene quantity from facility waste to increase to 10 Mg/yr (11 ton/yr) or more. If the information in the annual report required by paragraphs (a)(1) through (a)(3) of 40 CFR 61.357 is not changed in the following year, the permittee may submit a statement to that effect.

d. [61.357(d)]
If the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr (11 tons/yr), then the permittee shall submit to the Administrator the following reports:

i. [61.357(d)(1)]
By the date of initial startup for a new source, a certification that the equipment necessary to comply with these standards has been installed and that the required initial inspections or tests have been carried out in accordance with 40 CFR Part 61, Subpart FF.

ii. [61.357(d)(2)]
By December 30 of each year, the permittee shall submit annually to the Administrator, a report that updates the information listed in 40 CFR 61.357(a)(1) through (a)(3). If the information in the annual report required by 40 CFR 61.357(a)(1) through (a)(3) is not changed in the following year, the permittee may submit a statement to that effect.

iii. [61.357(d)(3)]
If the permittee elects to comply with the requirements of 40 CFR 61.342(c)(3)(ii) [See section A.II.], then the report required by 40 CFR 61.342(d)(2) [See section A.IV] shall include a table identifying each waste stream chosen for exemption and the total annual benzene quantity in these exempted streams.

iv. [61.357(d)(4)]
If the permittee elects to comply with the alternative requirements of 40 CFR 61.342(d), then the permittee shall include in the report required by paragraph

(d)(2) of 40 CFR 61.357 a table presenting the following information for each process wastewater stream:

(a) [61.357(d)(4)(i)]
Whether or not the process wastewater stream is being controlled for benzene emissions in accordance with the requirements of 40 CFR Part 61, Subpart FF;

(b) [61.357(d)(4)(ii)]
For each process wastewater stream identified as not being controlled for benzene emissions in accordance with the requirements of 40 CFR Part 61, Subpart FF, the table shall report the following information for the process wastewater stream as determined at the point of waste generation: annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity;

(c) 40 CFR 61.357(d)(4)(iii)
For each process wastewater stream identified as being controlled for benzene emissions in accordance with the requirements of 40 CFR Part 61, Subpart FF, the table shall report the following information for the process wastewater stream as determined at the exit to the treatment process: Annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.

v. [61.357(d)(5)]
If the permittee elects to comply with the alternative requirements of 40 CFR 61.342(e), then the report required by paragraph (d)(2) of 40 CFR 61.357 shall include a table presenting the following information for each waste stream:

(a) [61.357(d)(5)(i)]
For each waste stream identified as not being controlled for benzene emissions in accordance with the requirements of 40 CFR Part 61, Subpart FF; the table shall report the following information for the waste stream as determined at the point of waste generation: annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity;

(b) 40 CFR 61.357(d)(5)(ii)
For each waste stream identified as being controlled for benzene emissions in accordance with the requirements of 40 CFR Part 61, Subpart FF; the table shall report the following information for the waste stream as determined at the applicable location described in 40 CFR 61.355(k)(2): Annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.

vi. [61.357(d)(6)]
The permittee shall submit quarterly by March 30, June 30, September 30, and December 30 to the Administrator a certification that all of the required inspections have been carried out in accordance with the requirements of 40 CFR Part 61, Subpart FF.

vii. [61.357(d)(7)]
The permittee shall submit quarterly by March 30, June 30, September 30, and December 30 to the Administrator that includes:

(a) [61.357(d)(7)(i)]
If a treatment process or wastewater treatment system unit is monitored in accordance with 40 CFR 61.354(a)(1) [See section A.III], then each period of operation during which the concentration of benzene in the monitored waste stream exiting the unit is equal to or greater than 10 ppmw.

(b) [61.357(d)(7)(ii)]
If a treatment process or wastewater treatment system unit is monitored in accordance with 40 CFR 61.354(a)(2) [See section A.III], then each 3-hour period of operation during which the average value of the monitored parameter is outside the range of acceptable values or during which the unit is not operating as designed.

(c) [61.357(d)(7)(iii)]
If a treatment process or wastewater treatment system unit is monitored in accordance with 40 CFR 61.354(b) [See section A.III.], then each period of operation during which the flow-weighted annual average concentration of benzene in the monitored waste stream entering the unit is equal to or greater than 10 ppmw and/or the total annual benzene quantity is equal to or greater than 1.0 mg/yr (1.1 ton/yr).

(d) [61.357(d)(7)(iv)]
For a control device monitored in accordance with 40 CFR 61.354(c) [See section A.III], each period of operation monitored during which any of the following conditions occur, as applicable to the control device:

(i) [61.357(d)(7)(iv)(A)]
Each 3-hour period of operation during which the average temperature of the gas stream in the combustion zone of a thermal vapor incinerator, as measured by the temperature monitoring device, is more than 28°C below the design combustion zone temperature.

(ii) [61.357(d)(7)(iv)(B)]

Each 3-hour period of operation during which the average temperature of the gas stream immediately before the catalyst bed of a catalytic vapor incinerator, as measured by the temperature monitoring device, is more than 28°C below the design gas stream temperature, and any 3-hour period during which the average temperature difference across the catalyst bed (i.e., the difference between the temperatures of the gas stream immediately before and after the catalyst bed), as measured by the temperature monitoring device, is less than 80 percent of the design temperature difference.

(iii) [61.357(d)(7)(iv)(C)]
Each 3-hour period of operation during which the average temperature of the gas stream in the combustion zone of a boiler or process heater having a design heat input capacity less than 44 MW (150 x $10^6$ Btu), as measured by the temperature monitoring device, is more than 28°C below the design combustion zone temperature.

(iv) [61.357(d)(7)(iv)(D)]
Each 3-hour period of operation during which the average concentration of organics or the average concentration of benzene in the exhaust gases from a carbon adsorber, condenser, or other vapor recovery system is more than 20 percent greater than the design concentration level of organics or benzene in the exhaust gas.

(v) [61.357(d)(7)(iv)(E)]
Each 3-hour period of operation during which the temperature of the condenser exhaust vent stream is more than 6°C above the design average exhaust vent stream temperature, or the temperature of the coolant fluid exiting the condenser is more than 6°C above the design average coolant fluid temperature at the condenser outlet.

(vi) [61.357(d)(7)(iv)(F)]
Each period in which the pilot flame of a flare is absent.

(vii) [61.357(d)(7)(iv)(G)]
Each occurrence when there is a change in the location at which the vent stream is introduced into the flame zone of a boiler or process heater as required by 40 CFR 61.349(a)(2)(i)(C) [See section A.II].

(viii) [61.357(d)(7)(iv)(H)]

Each occurrence when the carbon in a carbon adsorber system that is regenerated directly on site in the control device is not regenerated at the predetermined carbon bed regeneration time.

(ix) [61.357(d)(7)(iv)(I)]
Each occurrence when the carbon in a carbon adsorber system that is not regenerated directly on site in the control device is not replaced at the predetermined interval specified in 40 CFR 61.354(c) [See section A.III].

(x) [61.357(d)(7)(iv)(J)]
Each 3-hour period of operation during which the parameters monitored are outside the range of values specified in 40 CFR 61.349(a)(2)(iv)(C) [See section A.II], or any other periods specified by the Administrator of U.S. EPA for a control device subject to the requirements of 40 CFR 61.349(a)(2)(iv).

(e) [61.357(d)(7)(v)]
For a cover and closed-vent system monitored in accordance with 40 CFR 61.354(g), the permittee shall submit a report quarterly by March 30, June 30, September 30, and December 30 quarterly to the Administrator that identifies any period in which the pressure in the waste management unit is equal to or greater than atmospheric pressure.

viii. [61.357(d)(8)]
By December 30 of each year, the permittee shall submit annually to the Administrator a report that summarizes all inspections required by 40 CFR 61.342 through 61.354 [See section A.III.] during which detectable emissions are measured or a problem (such as a broken seal, gap or other problem) that could result in benzene emissions is identified, including information about the repairs or corrective action taken.

e. [61.357(e)]
The permittee electing to comply with the provisions of 40 CFR 61.351 [See section A.II.] or 40 CFR 61.352 shall notify the Administrator of the alternative standard selected in the report required under 40 CFR 61.07 or 61.10.

f. [61.357(f)]
The permittee who elects to install and operate the control equipment in 61.351 [See section A.II.] shall comply with the reporting requirements in 40 CFR 60.115b.

g. [61.367(g)]
If the permittee elects to install and operate the control equipment in 40 CFR 61.352 [See section A.II], then the permittee shall submit initial and quarterly reports that identify all seal gap measurements, as required in 40 CFR 60.693-2(a) [See section A.III], that are outside the prescribed limits.

5. [OAC rule 3745-21-09)] REPORTING REQUIREMENTS FOR PETROLEUM REFINERY EQUIPMENT LEAKS OF VOCs FROM PUMP SEALS, PIPELINE VALVES, PROCESS DRAINS, COMPRESSOR SEALS AND PRESSURE RELIEF DEVICES

   a. [OAC rule 3745-21-09(T)(1)(i)] A report shall be submitted to the director by the fifteenth day of January, April, July and October that gives the total number of components monitored during the previous three calendar months, gives the total number of components found leaking during the previous three calendar months, identifies all components which were found leaking during the previous three calendar months but which were not repaired within fifteen days and identifies all leaking components which cannot be repaired until the next process unit turnaround.

   b. [OAC rule 3745-21-07(J)(3)]
   The following reporting requirements are required by special order of the Director in the August 19, 1987 Director's Final Findings and Orders. The permittee shall submit quarterly reports to the Toledo Division of Environmental Services which summarize the following information for each known relief which results in non-smokeless operation of the flare(s) during each calendar quarter.

      i. the date, time and duration of the relief;

      ii. the flare(s) involved;

      iii. the process unit(s) associated with the relief;

      iv. the cause of the relief; and,

      v. an explanation of why the relief was non-smokeless.

      These reports shall be submitted within 15 days of the end of each calendar quarter.

6. OAC chapter 3745-14 -- NOX Budget Trading Program

   a. [OAC rule 3745-14-08(E)]
   Record keeping and reporting.

      i. [OAC rule 3745-14-08(E)(1)]
      General provisions

         (a) [OAC rule 3745-14-08(E)(1)(a)]
         The NOx authorized account representative shall comply with all record keeping and reporting requirements in this rule and with the requirements of paragraph (A)(5) of OAC rule 3745-14-02.

         (b) [OAC rule 3745-14-08(E)(1)(b)]

If the NOx authorized account representative for a NOx budget unit subject to an acid rain emission limitation who signed and certified any submission that is made under Subpart F or G of 40 C.F.R. part 75 and which includes data and information required under this rule or Subpart H of 40 C.F.R. part 75 is not the same person as the designated representative or the alternative designated representative for the unit under 40 C.F.R. part 72, then the submission shall also be signed by the designated representative or the alternative designated representative.

ii. [OAC rule 3745-14-08(E)(2)]
Monitoring plans.

(a) [OAC rule 3745-14-08(E)(2)(a)]
The permittee of a unit subject to an Acid Rain emissions limitation shall comply with the requirements of 40 C.F.R. 75.62, except that the monitoring plan shall also include all of the information required by Subpart H of 40 C.F.R. part 75.

(b) [OAC rule 3745-14-08(E)(2)(b)]
The permittee of a unit that is not subject to an Acid Rain emissions limitation shall comply with the requirements of 40 C.F.R. 75.62, except that the monitoring plan is only required to include the information required by Subpart H of 40 C.F.R. part 75.

iii. [OAC rule 3745-14-08(E)(3)]
The NOx authorized account representative shall submit an application to the Administrator, U.S. EPA Region 5 office, and the director within forty-five days after completing all initial certification or recertification tests required under paragraph (B) of OAC rule 3745-14-08 including the information required under Subpart H of 40 C.F.R. part 75.

iv. [OAC rule 3745-14-08(E)(4)]
The NOx authorized account representative shall submit quarterly reports as follows:

(a) [OAC rule 3745-14-08(E)(4)(a)]
If a unit is subject to an Acid Rain emission limitation or if the permittee of the NOx budget unit chooses to meet the annual reporting requirements of OAC rule 3745-14-08, the NOx authorized account representative shall submit a quarterly report for each calendar quarter beginning with:

(i) [OAC rule 3745-14-08(E)(4)(a)(i)]
for a unit for which the permittee intends to apply or applies for the early reduction credit under paragraph (D) of OAC rule 3745-14-05the calendar quarter that includes the date of initial

provisional certification under paragraph (B)(2)(c)(iii) or (B)(3) of OAC rule 3745-14-08. Data shall be reported from the date and hour corresponding to the date and hour of provisional certification; or

(ii) [OAC rule 3745-14-08(E)(4)(a)(ii)]
for a unit that commences operation on or before May 1, 2003 and that is not subject to paragraph (E)(4)(a)(i) of OAC rule 3745-14-08, the earlier of the calendar quarter that includes the date of initial provisional certification under paragraph (B)(2)(c)(iii) or (B)(3) of OAC rule 3745-14-08 or, if the certification tests are not completed by May 1, 2003, the calendar quarter covering May 1, 2003 through June 30, 2003 Data shall be recorded and reported from the earlier of the date and hour corresponding to the date and hour of provisional certification or the first hour on May 1, 2003; or

(iii) [OAC rule 3745-14-08(E)(4)(a)(iii)]
for a unit that commences operation after May 1, 2003, the calendar quarter in which the unit commences operation. Data shall be reported from the date and hour corresponding to when the unit commenced operation.

(b) [OAC rule 3745-14-08(E)(4)(b)]
If a NOx budget unit is not subject to an Acid Rain emission limitation, then the NOx authorized account representative shall either:

(i) [OAC rule 3745-14-08(E)(4)(b)(i)]
meet all of the requirements of 40 C.F.R. part 75 related to monitoring and reporting NOx mass emissions during the entire year and meet the reporting deadlines specified in paragraph (E)(4)(a) of OAC rule 3745-14-08; or

(ii) [OAC rule 3745-14-08(E)(4)(b)(ii)]
submit quarterly reports covering the period May 1 through September 30 of each year and including the data described in 40 C.F.R. 75.74(c)(6). The NOx authorized account representative shall submit such quarterly reports, beginning with:

(aa) [OAC rule 3745-14-08(E)(4)(b)(ii)(a)]
for a unit for which the permittee intends to apply or applies for early reduction credit under paragraph (D) of OAC rule 3745-14-05the calendar quarter that includes the date of initial provisional certification under paragraph (B)(2)(c)(iii) or (B)(3) of OAC rule 3745-14-08. Data shall be recorded and reported from the date

and hour corresponding to the date and hour of provisional certification; or

(bb) [OAC rule 3745-14-08(E)(4)(b)(ii)(b)]
for a unit that commences operation on or before May 1, 2003 and that is not subject to paragraph (E)(4)(b)(i) of OAC rule 3745-14-08, the calendar quarter covering May 1 through June 30, 2003 Data shall be recorded and reported from the earlier of the date and hour corresponding to the date and hour of initial certification under paragraph (B)(2)(c)(iii) or (B)(3) of OAC rule 3745-14-08 or the first hour of May 1, 2003; or

(cc) [OAC rule 3745-14-08(E)(4)(b)(ii)(c)]
for a unit that commences operation after May 1, 2003 and during a control period, the calendar quarter in which the unit commences operation. Data shall be reported from the date and hour corresponding to when the unit commences operation; or

(dd) [OAC rule 3745-14-08(E)(4)(b)(ii)(d)]
for a unit that commences operation after May 1, 2003 and not during a control period, the calendar quarter covering the first control period after the unit commences operation. Data shall be recorded and reported from the earlier of the date and hour corresponding to the date and hour of initial provisional certification under paragraph (B)(2)(c)(iii) or (B)(3) of OAC rule 3745-14-08 or the first hour of May 1 of the first control period after the unit commences operation.

(c) [OAC rule 3745-14-08(E)(4)(c)]
The NOx authorized account representative shall submit each quarterly report to the Administrator within thirty days following the end of the calendar quarter covered by the report. Quarterly reports shall be submitted in the manner specified in Subpart H of 40 C.F.R. part 75 and 40 C.F.R. 75.64.

(i) [OAC rule 3745-14-08(E)(4)(c)(i)]
For units subject to an Acid Rain emissions limitation, quarterly reports shall include all of the data and information required in Subpart H of 40 C.F.R. part 75 for each NOx budget unit (or group of units using a common stack) and the data and information required in Subpart G of 40 C.F.R. part 75.

(ii) [OAC rule 3745-14-08(E)(4)(c)(ii)]
For units not subject to an Acid Rain emissions limitation, quarterly reports are only required to include all of the data and information required in Subpart H of 40 C.F.R. part 75 for each NOx budget unit (or group of units using a common stack).

(d) [OAC rule 3745-14-08(E)(4)(d)]
The NOx authorized account representative shall submit to the Administrator a compliance certification in support of each quarterly report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's' emissions are correctly and fully monitored. The compliance certification shall state that:

(i) [OAC rule 3745-14-08(E)(4)(d)(i)]
the monitoring data submitted were recorded in accordance with the applicable requirements of OAC rule 3745-14-08 and 40 C.F.R. part 75, including the quality assurance procedures and specifications;

(ii) [OAC rule 3745-14-08(E)(4)(d)(ii)]
for a unit with add-on NOx emission controls and for all hours where data are substituted in accordance with 40 C.F.R. 75.34(a)(1), the add-on emission controls were operating within the range of parameters listed in the quality assurance/quality control program under Appendix B of 40 C.F.R. part 75 and the substitute values do not systematically underestimate NOx emissions; and

(iii) [OAC rule 3745-14-08(E)(4)(d)(iii)]
for a unit that is reporting on a control period basis under paragraph (E)(4)(d)(ii) of OAC rule 3745-14-08, the NOx emission rate and NOx concentration values substituted for missing data under subpart D of 40 C.F.R. part 75 are calculated using only values from a control period and do not systematically underestimate NOx emissions.

b. [OAC rule 3745-14-08(F)]
Petitions.

(i) [OAC rule 3745-14-08(F)(1)]
The NOx authorized account representative of a NOx budget unit that is subject to an Acid Rain emission limitation may submit a petition under 40 C.F.R. 75.66 to the Administrator requesting approval to apply an alternative to any requirement of OAC rule 3745-14-08.

(a) [OAC rule 3745-14-08(F)(1)(a)]

Application of an alternative to any requirement of OAC rule 3745-14-08 shall be in accordance with this rule only to the extent that the petition is approved by the Administrator in consultation with the director.

(b) [OAC rule 3745-14-08(F)(1)(b)]
Notwithstanding paragraph (F)(1)(a) of OAC rule 3745-14-08, if the petition requests approval to apply an alternative to a requirement concerning any additional CEMS required under the common stack provisions of 40 C.F.R. 75.72, the petition shall be governed by paragraph (F)(2) of OAC rule 3745-14-08.

ii. [OAC rule 3745-14-08(F)(2)]
The NOx authorized account representative of a NOx budget unit that is not subject to an Acid Rain emission limitation may submit a petition under 40 C.F.R. 75.66 to the director and the Administrator requesting approval to apply an alternative to any requirement of OAC rule 3745-14-08.

(a) [OAC rule 3745-14-08(F)(2)(a)]
The NOx authorized account representative of a NOx budget unit that is subject to an Acid Rain emission limitation may submit a petition under 40 C.F.R. 75.66 to the director and the Administrator requesting approval to apply an alternative to a requirement concerning any additional CEMS required under the common stack provisions of 40 C.F.R. 75.72 or a NOx concentration CEMS used under 40 C.F.R. 75.71(a)(2).

(b) [OAC rule 3745-14-08(F)(2)(b)]
Application of an alternative to any requirement of OAC rule 3745-14-08 shall be in accordance with this rule only to the extent the petition under paragraph (F)(2) of OAC rule 3745-14-08 is approved by both the director and the Administrator.

c. [OAC rule 3745-14-08(G)]
Additional requirements to provide heat input data for allocation purposes.
The permittee of a NOx budget unit that monitors and reports NOx mass emissions using a NOx concentration system and a flow system shall also monitor and report heat input rate at the unit level using the procedures set forth in 40 CFR Part 75.

7. 40 CFR Part 63, Subpart A - Reporting Requirements

a. [63.9(j)] *Change in information already provided*
Any change in the information already provided under Notification of Compliance Status shall be provided to the Administrator in writing within 15 calendar days after the change.

b. [63.10(d)] *General reporting requirements*

i. [63.10(d)(5)(i)] *Periodic startup, shutdown, and malfunction reports*
If actions taken by the permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan [see 40 CFR63.6(e)(3)], the permittee shall state such information in a startup, shutdown, and malfunction report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period, and they must include the number, duration, and a brief description of each startup, shutdown, or malfunction. The startup, shutdown, and malfunction report shall consist of a letter, containing the name, title, and signature of the permittee or other responsible official who is certifying its accuracy, that shall be submitted to the Administrator semiannually (or on a more frequent basis if specified otherwise in a relevant standard or as established otherwise by the permitting authority in the source's title V permit). The startup, shutdown, and malfunction report shall be delivered or postmarked by the 30th day following the end of each calendar half (or other calendar reporting period, as appropriate). If the permittee is required to submit excess emissions and continuous monitoring system performance (or other periodic) reports under 40 CFR Part 63, the startup, shutdown, and malfunction reports required under this paragraph may be submitted simultaneously with the excess emissions and continuous monitoring system performance (or other) reports. If startup, shutdown, and malfunction reports are submitted with excess emissions and continuous monitoring system performance (or other periodic) reports, and the permittee receives approval to reduce the frequency of reporting for the latter under 40 CFR 63.10(e), the frequency of reporting for the startup, shutdown, and malfunction reports also may be reduced if the Administrator does not object to the intended change. The procedures to implement the allowance in the preceding sentence shall be the same as the procedures specified in 40 CFR 63.10(e)(3).

ii. [63.10(d)(5)(ii)] *Immediate startup, shutdown, and malfunction reports*
Notwithstanding the allowance to reduce the frequency of reporting for periodic startup, shutdown, and malfunction reports under 40 CFR 63.10(d)(5)(i), any time an action taken by the permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, the permittee shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan followed by a letter within 7 working days after the end of the event. The immediate report required under this paragraph shall consist of a telephone call (or facsimile [FAX] transmission) to the Administrator within 2 working days after commencing actions inconsistent with the plan, and it shall be followed by a letter, delivered or postmarked within 7 working days after the end of the event, that contains the name, title, and signature of the permittee or other responsible official who is certifying its accuracy, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions

and/or parameter monitoring accedences are believed to have occurred. Notwithstanding the requirements of the previous sentence, after the effective date of an approved permit program in the State in which an affected source is located, the permittee may make alternative reporting arrangements, in advance, with the permitting authority in that State. Procedures governing the arrangement of alternative reporting requirements under this paragraph are specified in 40 CFR 63.9(i).

c. [63.10(e)] *Additional reporting requirements for sources with continuous monitoring systems—*

i. [63.10(e)(1)] *General*
When more than one CEMS is used to measure the emissions from one affected source (e.g., multiple breechings, multiple outlets), the permittee shall report the results as required for each CEMS.

ii. [63.10(e)(2)] *Reporting results of continuous monitoring system performance evaluations*

(a) [63.10(e)(2)(i)]
The permittee of an affected source required to install a CMS by a relevant standard shall furnish the Administrator a copy of a written report of the results of the CMS performance evaluation, as required under 40 CFR 63.8(e), simultaneously with the results of the performance test required under 40 CFR 63.7, unless otherwise specified in the relevant standard.

(b) [63.10(e)(2)(ii)]
The permittee of an affected source using a COMS to determine opacity compliance during any performance test required under 40 CFR 63.7 and described in 40 CFR 63.6(d)(6) shall furnish the Administrator two or, upon request, three copies of a written report of the results of the COMS performance evaluation conducted under 40 CFR 63.8(e). The copies shall be furnished at least 15 calendar days before the performance test required under 40 CFR 63.7 is conducted.

iii. [63.10(e)(3)] *Excess emissions and continuous monitoring system performance report and summary report*

(a) [63.10(e)(3)(i)]
Excess emissions and parameter monitoring accedences are defined in relevant standards. The permittee of an affected source required to install a CMS by a relevant standard shall submit an excess emissions and continuous monitoring system performance report and/or a summary report to the Administrator semiannually, except when—

(i) [63.10(e)(3)(i)(A)]

More frequent reporting is specifically required by a relevant standard;

(ii) [63.10(e)(3)(i)(B)]
The Administrator determines on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the source; or

(b) [63.10(e)(3)(ii)] *Request to reduce frequency of excess emissions and continuous monitoring system performance reports*
Notwithstanding the frequency of reporting requirements specified in 40 CFR 63.10(e)(3)(i), the permittee who is required by a relevant standard to submit excess emissions and continuous monitoring system performance (and summary) reports on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

(i) [63.10(e)(3)(ii)(A)]
For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected source's excess emissions and continuous monitoring system performance reports continually demonstrate that the source is in compliance with the relevant standard;

(ii) [63.10(e)(3)(ii)(B)]
The permittee continues to comply with all record keeping and monitoring requirements specified in 40 CFR Part 63, Subpart A and the relevant standard; and

(iii) [63.10(e)(3)(ii)(C)]
The Administrator does not object to a reduced frequency of reporting for the affected source, as provided in 40 CFR 63.10(e)(3)(iii).

(c) [63.10(e)(3)(iii)]
The frequency of reporting of excess emissions and continuous monitoring system performance (and summary) reports required to comply with a relevant standard may be reduced only after the permittee notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the 5-year record keeping period prior to the intended change, including performance test results, monitoring data, and evaluations of the permittee's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment

about the source's potential for noncompliance in the future. If the Administrator disapproves the permittee's request to reduce the frequency of reporting, the Administrator will notify the permittee in writing within 45 days after receiving notice of the permittee's intention. The notification from the Administrator to the permittee will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

(d) [63.10(e)(3)(iv)]
As soon as CMS data indicate that the source is not in compliance with any emission limitation or operating parameter specified in the relevant standard, the frequency of reporting shall revert to the frequency specified in the relevant standard, and the permittee shall submit an excess emissions and continuous monitoring system performance (and summary) report for the noncomplying emission points at the next appropriate reporting period following the noncomplying event. After demonstrating ongoing compliance with the relevant standard for another full year, the permittee may again request approval from the Administrator to reduce the frequency of reporting for that standard, as provided for in paragraphs (e)(3)(ii)and (e)(3)(iii) of 40 CFR 63.10.

(e) [63.10(e)(3)(v)] *Content and submittal dates for excess emissions and monitoring system performance reports*
All excess emissions and monitoring system performance reports and all summary reports, if required, shall be delivered or postmarked by the 30th day following the end of each calendar half or quarter, as appropriate. Written reports of excess emissions or accedences of process or control system parameters shall include all the information required in paragraphs (c)(5) through (c)(13) of 40 CFR 63.10, in 40 CFR63.8(c)(7) and 40 CFR 63.8(c)(8), and in the relevant standard, and they shall contain the name, title, and signature of the responsible official who is certifying the accuracy of the report. When no excess emissions or accedences of a parameter have occurred, or a CMS has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report.

(f) [63.10(e)(3)(vi)] *Summary report*
As required under paragraphs (e)(3)(vii) and (e)(3)(viii) of 40 CFR 63.10, one summary report shall be submitted for the hazardous air pollutants monitored at each affected source (unless the relevant standard specifies that more than one summary report is required, e.g., one summary report for each hazardous air pollutant monitored). The summary report shall be entitled "Summary Report—Gaseous and Opacity Excess Emission and Continuous Monitoring System Performance" and shall contain the following information:

(i) [63.10(e)(3)(vi)(A)]
The company name and address of the affected source;

(ii) [63.10(e)(3)(vi)(B)]
An identification of each hazardous air pollutant monitored at the affected source;

(iii) [63.10(e)(3)(vi)(C)]
The beginning and ending dates of the reporting period;

(iv) [63.10(e)(3)(vi)(D)]
A brief description of the process units;

(v) [63.10(e)(3)(vi)(E)]
The emission and operating parameter limitations specified in the relevant standard(s);

(vi) [63.10(e)(3)(vi)(F)]
The monitoring equipment manufacturer(s) and model number(s);

(vii) [63.10(e)(3)(vi)(G)]
The date of the latest CMS certification or audit;

(viii) [63.10(e)(3)(vi)(H)]
The total operating time of the affected source during the reporting period;

(ix) [63.10(e)(3)(vi)(I)]
An emission data summary (or similar summary if the permittee monitors control system parameters), including the total duration of excess emissions during the reporting period (recorded in minutes for opacity and hours for gases), the total duration of excess emissions expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total duration of excess emissions during the reporting period into those that are due to startup/shutdown, control equipment problems, process problems, other known causes, and other unknown causes;

(x) [63.10(e)(3)(vi)(J)]
A CMS performance summary (or similar summary if the permittee monitors control system parameters), including the total CMS downtime during the reporting period (recorded in minutes for opacity and hours for gases), the total duration of CMS downtime expressed as a percent of the total source operating time during that reporting period, and a breakdown of

the total CMS downtime during the reporting period into periods that are due to monitoring equipment malfunctions, non-monitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes, and other unknown causes;

(xi) [63.10(e)(3)(vi)(K)]
A description of any changes in CMS, processes, or controls since the last reporting period;

(xii) [63.10(e)(3)(vi)(L)]
The name, title, and signature of the responsible official who is certifying the accuracy of the report; and

(xiii) [63.10(e)(3)(vi)(M)]
The date of the report.

(g) [63.10(e)(3)(vii)]
If the total duration of excess emissions or process or control system parameter accedences for the reporting period is less than 1 percent of the total operating time for the reporting period, and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report shall be submitted, and the full excess emissions and continuous monitoring system performance report need not be submitted unless required by the Administrator.

(h) [63.10(e)(3)(viii)]
If the total duration of excess emissions or process or control system parameter accedences for the reporting period is 1 percent or greater of the total operating time for the reporting period, or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, both the summary report and the excess emissions and continuous monitoring system performance report shall be submitted.

iv. [63.10(e)(4)] *Reporting continuous opacity monitoring system data produced during a performance test.*
The permittee of an affected source required to use a COMS shall record the monitoring data produced during a performance test required under 40 CFR 63.7 and shall furnish the Administrator a written report of the monitoring results. The report of COMS data shall be submitted simultaneously with the report of the performance test results required in 40 CFR 63.10(d)(2).

d. [63.10(f)] *Waiver of record keeping or reporting requirements.*

i. [63.10(f)(1)]

Until a waiver of a record keeping or reporting requirement has been granted by the Administrator under this paragraph, the permittee of an affected source remains subject to the requirements of 40 CFR 63.10.

ii. [63.10(f)(2)]
Record keeping or reporting requirements may be waived upon written application to the Administrator if, in the Administrator's judgment, the affected source is achieving the relevant standard(s), or the source is operating under an extension of compliance, or the permittee has requested an extension of compliance and the Administrator is still considering that request.

iii. [63.10(f)(3)]
If an application for a waiver of record keeping or reporting is made, the application shall accompany the request for an extension of compliance under 40 CFR 63.6(i), any required compliance progress report or compliance status report required under 40 CFR Part 63 [such as under 40 CFR 63.6(i) and 40 CFR 63.9(h)] or in the source's title V permit, or an excess emissions and continuous monitoring system performance report required under 40 CFR 63.10(e), whichever is applicable. The application shall include whatever information the permittee considers useful to convince the Administrator that a waiver of record keeping or reporting is warranted.

iv. [63.10(f)(4)]
The Administrator will approve or deny a request for a waiver of record keeping or reporting requirements under this paragraph when he/she—

(a) [63.10(f)(4)(i)]
Approves or denies an extension of compliance; or

(b) [63.10(f)(4)(ii)]
Makes a determination of compliance following the submission of a required compliance status report or excess emissions and continuous monitoring systems performance report; or

(c) [63.10(f)(4)(iii)]
Makes a determination of suitable progress towards compliance following the submission of a compliance progress report, whichever is applicable.

v. [63.10(f)(5)]
A waiver of any record keeping or reporting requirement granted under this paragraph may be conditioned on other record keeping or reporting requirements deemed necessary by the Administrator.

vi. [63.10(f)(6)]
Approval of any waiver granted under 40 CFR 63.10 shall not abrogate the Administrator's authority under the Act or in any way prohibit the

Administrator from later canceling the waiver. The cancellation will be made only after notice is given to the permittee of the affected source.

8. Section 112(j) of the Clean Air Act MACT "Hammer" Requirements

a. The permittee may be subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the following: Industrial, Commercial and Institutional Boilers and Process Heaters, 40 CFR Part 63, Subpart DDDDD; Organic Liquids Distribution (non-gasoline), 40 CFR Part 63, Subpart EEEE; and, Reciprocating Internal Combustion Engines, 40 CFR Part 63, Subpart ZZZZ. U.S. EPA failed to promulgate this standard by May 15, 2002, the Maximum Achievable Control Technology (MACT) hammer date. In accordance with 40 CFR Part 63, Subpart B (40 CFR Parts 63.50 through 63.56), the permittee shall submit an application to revise the permit to include equivalent emission limitations as a result of a case-by-case MACT determination. The application shall be submitted in two parts. The deadline to submit the Part I application, as specified in 40 CFR Part 63.53, was May 15, 2002.

b. If the final NESHAP standard is not promulgated by the deadline specified by U.S. EPA, the permittee shall submit the Part II application as specified in 40 CFR Part 63.53. The Part II application shall be submitted within 60 days after the deadline to promulgate the respective standard or by May 15, 2003, whichever is later. It must contain the following information, unless otherwise specified by future U.S. EPA regulations:

i. for a new affected source, the anticipated date of startup of operation;

ii. the hazardous air pollutants (HAPs) emitted by each affected source in the relevant source category and an estimated total uncontrolled and controlled emission rate for HAPs from the affected source;

iii. any existing federal, State, or local limitations or requirements applicable to the affected source;

iv. for each affected emission point or group of affected emission points, an identification of control technology in place;

v. information relevant to establishing the MACT floor (or MACT emission limitation), and, at the option of the permittee, a recommended MACT floor; and

vi. any other information reasonably needed by the permitting authority including, at the discretion of the permitting authority, information required pursuant to Subpart A of 40 CFR Part 63.

The Part II application for a MACT determination may, but is not required to, contain the following information:

vii. recommended emission limitations for the affected source and support information (the permittee may recommend a specific design, equipment, work practice, or operational standard, or combination thereof, as an emission limitation);

viii. a description of the control technologies that would be applied to meet the emission limitation, including technical information on the design, operation, size, estimated control efficiency and any other information deemed appropriate by the permitting authority, and identification of the affected sources to which the control technologies must be applied; and

ix. relevant parameters to be monitored and frequency of monitoring to demonstrate continuous compliance with the MACT emission limitation over the applicable reporting period.

c. If the NESHAP is promulgated before the Part II application is due for the relevant source category, the permittee may be subject to the rule as an existing major source with a compliance date as specified in the NESHAP. If subject, the permittee shall submit the following notifications:

i. Unless otherwise specified in the relevant Subpart, within 120 days after promulgation of a 40 CFR Part 63, Subpart to which the source is subject, the permittee shall submit an Initial Notification Report that contains the following information, in accordance with 40 CFR Part 63.9(b)(2):

(a) the name and mailing address of the permittee;

(b) the physical location of the source if it is different from the mailing address;

(c) identification of the relevant MACT standard and the source's compliance date;

(d) a brief description of the nature, design, size, and method of operation of the source, and an identification of the types of emission points within the affected source subject to the relevant standard and the types of HAPs emitted; and

(e) a statement confirming the facility is a major source for HAPs.

ii. Unless otherwise specified in the relevant Subpart, within 60 days following completion of any required compliance demonstration activity specified in the relevant Subpart, the permittee shall submit a notification of compliance status that contains the following information:

(a) the methods used to determine compliance;

(b) the results of any performance tests, visible emission observations, continuous monitoring systems performance evaluations, and/or other monitoring procedures or methods that were conducted;

(c) the methods that will be used for determining continuous compliance, including a description of monitoring and reporting requirements and test methods;

(d) the type and quantity of HAPs emitted by the source, reported in units and averaging times in accordance with the test methods specified in the relevant Subpart;

(e) an analysis demonstrating whether the affected source is a major source or an area source;

(e) a description of the air pollution control equipment or method for each emission point, including each control device or method for each HAP and the control efficiency (percent) for each control device or method; and

(f) a statement of whether or not the permittee has complied with the requirements of the relevant Subpart.

## V. Testing Requirements

1. [60.485] TEST METHODS AND PROCEDURES, LEAK DETECTION - 40 CFR Part 60, Subpart VV

a. [60.485(a)]
In conducting the performance tests required in 40 CFR 60.8, the permittee shall use as reference methods and procedures the test methods in Appendix A of 40 CFR Part 60 or other methods and procedures as specified in this section, except as provided in 40 CFR 60.8(b).

b. [60.485(b)]
The permittee shall determine compliance with the standards in 60.482, 60.483, and 60.484 [See section A.II.] as follows. Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used:

i. [60.485(b)(1)(i)]
zero air (less than 10 ppm of hydrocarbon in air); and

ii. [60.485(b)(1)(ii)]
a mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane.

c. [60.485(c)]
The permittee shall determine compliance with the no detectable emission standards in 60.482-2(e), 60.482-3(i), 60.482-4, 60.482-7(f) and 60.482-10(e) [See section A.II.] as follows:

i. [60.485(c)(1)]
The requirements of 40 CFR 60.485(b) shall apply.

ii. [60.485(c)(2)]
Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

d. [60.485(d)]
The permittee shall test each piece of equipment unless the permittee demonstrates that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used:

i. [60.485(d)(1)]
Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference-see 40 CFR 60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment.

ii. [60.485(d)(2)]
Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid.

iii. [60.485(d)(3)]
Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagree with the judgment, paragraphs d(1) and (d)(2) of 40 CFR 60.485 shall be used to resolve the disagreement.

e. [60.485(e)]
The permittee shall demonstrate that an equipment is in light liquid service by showing that all the following conditions apply:

i. [60.485(e)(1)]
The vapor pressure of one or more of the components is greater than 0.3 kPa at 20°C. Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference-see 40 CFR 60.17) shall be used to determine the vapor pressures.

ii. [60.485(e)(2)]
The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at20°C is equal to or greater than 20 percent by weight.

iii. [60.485(e)(3)]
The fluid is a liquid at operating conditions.

f. [60.485(f)]
Samples used in conjunction with paragraphs (d), (e), and (g) of 40 CFR 60.485 shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare.

g. [60.485(g)]
The permittee shall determine compliance with the standards of flares as follows:

i. [60.685(g)(1)]
Method 22 shall be used to determine visible emissions.

ii. [60.485(g)(2)]
A thermocouple or any other equivalent device shall be used to monitor the presence of a pilot flame in the flare.

iii. [60.485(g)(3)]
The maximum permitted velocity ($V_{max}$) for air-assisted flares shall be computed using the following equation:

$$V_{max} = K_1 + K_2 H_T$$

where:
Vmax = Maximum permitted velocity, m/sec (ft/sec)
HT = Net heating value of the gas being combusted, MJ/scm (Btu/scf).
K1 = 8.706 m/sec (metric units)
= 28.56 ft/sec (English units)
K2 = 0.7084 m 4/(MJ-sec) (metric units)
= 0.087 ft 4/(Btu-sec) (English units)

iv. [60.485(g)(4)]
The net heating value ($H_T$) of the gas being combusted in a flare shall be computed using the equation found in 40 CFR 60.685(g)(4).

v. [60.485(g)(5)]
Method 18 and ASTM D 2504-67, 77, or 88 (Reapproved 1993) (incorporated by reference-see 40 CFR 60.17) shall be used to determine the concentration of sample component "i.".

vi. [60.485(g)(6)]

ASTM D 2382-76 or 88 or D4809-95 (incorporated by reference-see 40 CFR 60.17) shall be used to determine the net heat of combustion of component "i" if published values are not available or cannot be calculated.

vii. [60.485(g)(7)]
Method 2, 2A, 2C, or 2D, as appropriate, shall be used to determine the actual exit velocity of a flare. If needed, the unobstructed (free) cross-sectional area of the flare tip shall be used.

2. [63.645] TEST METHODS AND PROCEDURES FOR MISC. PROCESS VENTS - 40 CFR Part 63, Subpart CC

a. [63.645(a)]
To demonstrate compliance with 63.643 [See section A.II.], the permittee shall follow 40 CFR 63.116 except for 40 CFR 63.116(a)(1), (d) and (e) except as provided in 40 CFR 63.645(b) through (d) and paragraph (i).

b. [63.645(g) and (g)(1)]
Engineering assessment may be used to determine the TOC emission rate for the representative operating condition expected to yield the highest daily emission rate. Engineering assessment includes, but is not limited to, the following:

i. Previous test results provided the tests are representative of current operating practices at the process unit.

ii. Bench-scale or pilot-scale test data representative of the process under representative operating conditions.

iii. TOC emission rate specified or implied within a permit limit applicable to the process vent.

iv. Design analysis based on accepted chemical engineering principles, measurable process parameters, or physical or chemical laws or properties. Examples of analytical methods include, but are not limited to:

(a) use of material balances based on process stoichiometry to estimate maximum TOC concentrations;

(b) estimation of maximum flow rate based on physical equipment design such as pump or blower capacities; and

(c) estimation of TOC concentrations based on saturation conditions.

v. All data, assumptions, and procedures used in the engineering assessment shall be documented.

3. [63.116] PROCESS VENT PERFORMANCE TEST METHODS - 40 CFR Part 63, Subpart G

a. [63.116(a) and (a)(2)]
When a flare is used to comply with 63.643(a)(1) [See section A.II.], the permittee shall comply with the flare provisions in 40 CFR 63.11(b) of Subpart A. The permittee is not required to conduct a performance test to determine percent emission reduction or outlet organic HAP or TOC concentration when a flare is used.

b. [63.116(b)]
The permittee is not required to conduct a performance test when any control device specified in paragraphs (b)(1) through (b)(5) of 40 CFR 63.116 is used.

i. [63.116(b)(1)]
Any boiler or process heater with a design heat input capacity of 44 megawatts or greater.

ii. [63.116(b)(2)]
Any boiler or process heater into which all vent streams are introduced into the flame zone.

iii. [63.116(b)(3)]
A control device for which a performance test was conducted for determining compliance with a regulation promulgated by the EPA and the test was conducted using the same methods specified in this section and either no process changes have been made since the test, or the permittee can demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process changes.

iv. [63.116(b)(4)]
A boiler or process heater burning hazardous waste.

v. [63.116(b)(5)]
A hazardous waste incinerator for which the permittee has been issued a final permit under 40 CFR Part 270 complies with the requirements of 40 CFR Part 264, Subpart O, or has certified compliance with the interim status requirements of 40 CFR Part 264, Subpart O.

c. [63.116(c)]
Except as provided in 63.116(a) and (b) [See section A.V], the permittee using a control device to comply with the organic HAP concentration limit or percent reduction efficiency requirements in 63.116(a)(2) [See section A.V] shall conduct a performance test using the procedures in 63.116(c)(1) through (c)(4) [See section A.V]. The organic HAP concentration and percent reduction may be measured as either total organic HAP or as TOC minus methane and ethane according to the procedures specified.

i. [63.116(c)(1)]
Method 1 or Method 1A of 40 CFR Part 60, Appendix A, as appropriate, shall be used for selection of the sampling sites.

(a) For determination of compliance with the 98 percent reduction of total organic HAP requirement of 63..643(a)(2) [See section A.II.] sampling sites shall be located at the inlet of the control device as specified in paragraphs d.i.(a)(i) and d.i.(a)(ii) [see below], and at the outlet of the control device.

(i) The control device inlet sampling site shall be located after the final product recovery device.

(ii) If a process vent stream is introduced with the combustion air or as a secondary fuel into a boiler or process heater with a design capacity less than 44 megawatts, selection of the location of the inlet sampling sites shall ensure the measurement of total organic HAP or TOC (minus methane and ethane) concentrations in all process vent streams and primary and secondary fuels introduced into the boiler or process heater.

(b) For determination of compliance with the 20 parts per million by volume total organic HAP limit in 63.643(a)(2) [See section A.II.], the sampling site shall be located at the outlet of the control device.

ii. [63.116(c)(2)]
The gas volumetric flow rate shall be determined using Method 2, 2A, 2C, or 2D of 40 CFR part 60, Appendix A, as appropriate.

iii. [63.116(c)(3)]
To determine compliance with the 20 parts per million by volume total organic HAP limit in 63.643(a)(2) [See section A.II.], the permittee shall use Method 18 of 40 CFR Part 60, Appendix A to measure either TOC minus methane and ethane or total organic HAP. Alternatively, any other method or data that has been validated according to the applicable procedures in Method 301 of Appendix A of 40 CFR Part 60, may be used. The following procedures shall be used to calculate parts per million by volume concentration, corrected to 3 percent oxygen:

(a) The minimum sampling time for each run shall be 1 hour in which either an integrated sample or a minimum of four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at approximately equal intervals in time, such as 15 minute intervals during the run.

(b) The concentration of either TOC (minus methane or ethane) or total organic HAP shall be calculated according to 40 CFR 63.116(c)(3)(ii)(A) or (c)(3)(ii)(B) of Subpart G.

(c) The concentration of TOC or total organic HAP shall be corrected to 3 percent oxygen if a combustion device is the control device.

(i) The emission rate correction factor or excess air, integrated sampling and analysis procedures of Method 3B of 40 CFR Part 60, Appendix A, shall be used to determine the oxygen concentration ($\%O_{2d}$). The samples shall be taken during the same time that the TOC (minus methane or ethane) or total organic HAP samples are taken.

(ii) The concentration corrected to 3 percent oxygen $©_c$) shall be computed using either of the following equations found in 40 CFR 63.116(c)(3)(iii)(B) of Subpart G.

iv. [63.116(c)(4)]
To determine compliance with the 98 percent reduction requirement of 63.643(a)(2) [See section A.II.], the permittee shall use Method 18 of 40 CFR Part 60, Appendix A; alternatively, any other method or data that has been validated according to the applicable procedures in Method 301 of Appendix A of 40 CFR Part 60 may be used. The procedures in 40 CFR 63.116(c)(4)(i) through (c)(4)(iv) shall be used to calculate percent reduction efficiency.

4. 40 CFR Part 63, Subpart H - National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks

a. 40 CFR 63.180 Test methods and procedures.

i. [63.180(a)]
Each permittee subject to the provisions of 40 CFR Part 63, Subpart H shall comply with the test methods and procedures requirements provided in this section.

ii. [63.180(b)]
Monitoring, as required under 40 CFR Part 63, Subpart H, shall comply with the following requirements:

(a) [63.180(b)(1)]
Monitoring shall comply with Method 21 of part 60, Appendix A.

(b) (i) [63.180(b)(2)(i)]
Except as provided for in paragraph (b)(2)(ii) of 40 CFR 63.180, the detection instrument shall meet the performance criteria of Method 21 of part 60, Appendix A, except the

instrument response factor criteria in Section 3.1.2(a) of Method 21 shall be for the average composition of the process fluid not each individual VOC in the stream. For process streams that contain nitrogen, water, air, or other inerts which are not organic HAP's or VOC's, the average stream response factor may be calculated on an inert-free basis. The response factor may be determined at any concentration for which monitoring for leaks will be conducted.

(ii) [63.180(b)(2)(ii)]
If no instrument is available at the plant site that will meet the performance criteria specified in paragraph (b)(2)(i) of 40 CFR 63.180, the instrument readings may be adjusted by multiplying by the average response factor of the process fluid, calculated on an inert-free basis as described in paragraph (b)(2)(i) of 40 CFR 63.180.

(iii) [63.180(b)(3)]
The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, Appendix A.

(iv) [63.180(b)(4)]
Calibration gases shall be:

(aa) [63.180(b)(4)(i)]
Zero air (less than 10 parts per million of hydrocarbon in air); and

(bb) [63.180(b)(4)(ii)]
Mixtures of methane in air at the concentrations specified in paragraphs (b)(4)(ii)(A) through (b)(4)(ii)(C) of 40 CFR 63.180. A calibration gas other than methane in air may be used if the instrument does not respond to methane or if the instrument does not meet the performance criteria specified in paragraph (b)(2)(i) of 40 CFR 63.180. In such cases, the calibration gas may be a mixture of one or more of the compounds to be measured in air.

(aaa) [63.180(b)(4)(ii)(A)]
For Phase I, a mixture of methane or other compounds, as applicable, in air at a concentration of approximately, but less than, 10,000 parts per million.

(bbb) [63.180(b)(4)(ii)(B)]

For Phase II, a mixture of methane or other compounds, as applicable, and air at a concentration of approximately, but less than, 10,000 parts per million for agitators, 5,000 parts per million for pumps, and 500 parts per million for all other equipment, except as provided in paragraph (b)(4)(iii) of 40 CFR 63.180.

(ccc) [63.180(b)(4)(ii)(C)]
For Phase III, a mixture of methane or other compounds, as applicable, and air at a concentration of approximately, but less than, 10,000 parts per million methane for agitators; 2,000 parts per million for pumps in food/medical service; 5,000 parts per million for pumps in polymerizing monomer service; 1,000 parts per million for all other pumps; and 500 parts per million for all other equipment, except as provided in paragraph (b)(4)(iii) of 40 CFR 63.180.

(ddd) [63.180(b)(4)(iii)]
The instrument may be calibrated at a higher methane concentration than the concentration specified for that piece of equipment. The concentration of the calibration gas may exceed the concentration specified as a leak by no more than 2,000 parts per million. If the monitoring instrument's design allows for multiple calibration scales, then the lower scale shall be calibrated with a calibration gas that is no higher than 2,000 parts per million above the concentration specified as a leak and the highest scale shall be calibrated with a calibration gas that is approximately equal to 10,000 parts per million. If only one scale on an instrument will be used during monitoring, the permittee need not calibrate the scales that will not be used during that day's monitoring.

(v) [63.180(b)(5)]
Monitoring shall be performed when the equipment is in organic HAP service, in use with an acceptable surrogate volatile organic compound which is not an organic HAP, or is in use with any other detectable gas or vapor.

(vi) [63.180(b)(6)]
Monitoring data that do not meet the criteria specified in paragraphs (b)(1) through (b)(5) of 40 CFR 63.180 may be used to qualify for less frequent monitoring under the provisions in 40 CFR 63.168(d)(2) and (d)(3) or 40 CFR 63.174(b)(3)(ii) or (b)(3)(iii) provided the data meet the conditions specified in paragraphs (b)(6)(i) and (b)(6)(ii) of 40 CFR 63.180.

(aa) [63.180(b)(6)(i)]
The data were obtained before April 22, 1994.

(bb) [63.180(b)(6)(ii)]
The departures from the criteria specified in paragraphs (b)(1) through (b)(5) of 40 CFR 63.180 or from the specified monitoring frequency of 40 CFR 63.168(c) are minor and do not significantly affect the quality of the data. Examples of minor departures are monitoring at a slightly different frequency (such as every six weeks instead of monthly or quarterly), following the performance criteria of section 3.1.2(a) of Method 21 of Appendix A of 40 CFR Part 60 instead of paragraph (b)(2) of 40 CFR 63.180, or monitoring at a different leak definition if the data would indicate the presence or absence of a leak at the concentration specified in 40 CFR Part 63, Subpart H. Failure to use a calibrated instrument is not considered a minor departure.

iii. [63.180(c)]
When equipment is monitored for compliance as required in 40 CFR 63.164(i), 63.165(a), and 63.172(f) [See section A.II] or when equipment subject to a leak definition of 500 ppm is monitored for leaks as required by 40 CFR Part 63, Subpart H, the permittee may elect to adjust or not to adjust the instrument readings for background. If the permittee elects to not adjust instrument readings for background, the permittee shall monitor the equipment according to the procedures specified in paragraphs (b)(1) through (b)(4) of 40 CFR 63.180. In such case, all instrument readings shall be compared directly to the applicable leak definition to determine whether there is a leak. If the permittee elects to adjust instrument readings for background, the permittee shall monitor the equipment according to the procedures specified in paragraphs (c)(1) through (c)(4) of 40 CFR 63.180.

(a) [63.180(c)(1)]
The requirements of paragraphs (b)(1) through (4) of 40 CFR 63.180 shall apply.

(b) [63.180(c)(2)]

The background level shall be determined, using the same procedures that will be used to determine whether the equipment is leaking.

(c) [63.180(c)(3)]
The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21 of 40 CFR part 60, Appendix A.

(d) [63.180(c)(4)]
The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 parts per million for determining compliance.

iv. (a) [63.180(d)(1)]
Each piece of equipment within a process unit that can reasonably be expected to contain equipment in organic HAP service is presumed to be in organic HAP service unless the permittee demonstrates that the piece of equipment is not in organic HAP service. For a piece of equipment to be considered not in organic HAP service, it must be determined that the percent organic HAP content can be reasonably expected not to exceed 5 percent by weight on an annual average basis. For purposes of determining the percent organic HAP content of the process fluid that is contained in or contacts equipment, Method 18 of 40 CFR part 60, Appendix A shall be used.

(b) (i) [63.180(d)(2)(i)]
The permittee may use good engineering judgment rather than the procedures in paragraph (d)(1) of 40 CFR 63.180 to determine that the percent organic HAP content does not exceed 5 percent by weight. When the permittee and the Administrator do not agree on whether a piece of equipment is not in organic HAP service, however, the procedures in paragraph (d)(1) of 40 CFR 63.180 shall be used to resolve the disagreement.

(ii) [63.180(d)(2)(ii)]
Conversely, the permittee may determine that the organic HAP content of the process fluid does not exceed 5 percent by weight by, for example, accounting for 98 percent of the content and showing that organic HAP is less than 3 percent.

(c) [63.180(d)(3)]
If the permittee determines that a piece of equipment is in organic HAP service, the determination can be revised after following the procedures in paragraph (d)(1) of 40 CFR 63.180, or by documenting that a change in the process or raw materials no longer causes the equipment to be in organic HAP service.

(d) [63.180(d)(4)]
Samples used in determining the percent organic HAP content shall be representative of the process fluid that is contained in or contacts the equipment.

v. [63.180(e)]
When a flare is used to comply with 40 CFR 63.172(d) [See section A.II], the permittee shall comply with paragraphs (e)(1) through (3) of 40 CFR 63.180. The permittee is not required to conduct a performance test to determine percent emission reduction or outlet organic HAP or TOC concentration.

(a) [63.180(e)(1)]
Conduct a visible emission test using the techniques specified in 40 CFR 63.11(b)(4) [See section A.II].

(b) [63.180(e)(2)]
Determine the net heating value of the gas being combusted using the techniques specified in 40 CFR 63.11(b)(6) [See section A.II].

(c) [63.180(e)(3)]
Determine the exit velocity using the techniques specified in either 40 CFR 63.11(b)(7)(i) (and 40 CFR 63.11(b)(7)(iii), where applicable) or 40 CFR 63.11(b)(8), as appropriate [See section A.II].

vi. [63.180(f)]
The following procedures shall be used to pressure test batch product-process equipment for pressure or vacuum loss to demonstrate compliance with the requirements of 40 CFR 63.178(b)(3)(i) [See section A.II].

(a) [63.180(f)(1)]
The batch product-process equipment train shall be pressurized with a gas to a pressure less than the set pressure of any safety relief devices or valves or to a pressure slightly above the operating pressure of the equipment, or alternatively, the equipment shall be placed under a vacuum.

(b) [63.180(f)(2)]
Once the test pressure is obtained, the gas source or vacuum source shall be shut off.

(c) [63.180(f)(3)]
The test shall continue for not less than 15 minutes unless it can be determined in a shorter period of time that the allowable rate of pressure drop or of pressure rise was exceeded. The pressure in the batch product-process equipment shall be measured after the gas or vacuum source is shut off and at the end of the test period. The rate of

change in pressure in the batch product-process equipment shall be calculated using the following equation:

DP/t = (|Pf - Pi|) / (tf - ti)
where:

DP/t = change in pressure, psig/hr;
Pf = final pressure, psig;
Pi = initial pressure, psig; and
tf - ti = elapsed time, hours.

(d) [63.180(f)(4)]
The pressure shall be measured using a pressure measurement device (gauge, manometer, or equivalent) which has a precision of ±2.5 millimeter mercury in the range of test pressure and is capable of measuring pressures up to the relief set pressure of the pressure relief device. If such a pressure measurement device is not reasonably available, the permittee shall use a pressure measurement device with a precision of at least +10 percent of the test pressure of the equipment and shall extend the duration of the test for the time necessary to detect a pressure loss or rise that equals a rate of one psig per hour.

(e) [63.180(f)(5)]
An alternative procedure may be used for leak testing the equipment if the permittee demonstrates the alternative procedure is capable of detecting a pressure loss or rise.

vii. [63.180(g)]
The following procedures shall be used to pressure-test batch product-process equipment using a liquid to demonstrate compliance with the requirements of 40 CFR 63.178(b)(3)(ii) [See section A.II].

(a) [63.180(g)(1)]
The batch product-process equipment train, or section of the train, shall be filled with the test liquid (e.g., water, alcohol) until normal operating pressure is obtained. Once the equipment is filled, the liquid source shall be shut off.

(b) [63.180(g)(2)]
The test shall be conducted for a period of at least 60 minutes, unless it can be determined in a shorter period of time that the test is a failure.

(c) [63.180(g)(3)]
Each seal in the equipment being tested shall be inspected for indications of liquid dripping or other indications of fluid loss. If there are any indications of liquids dripping or of fluid loss, a leak is detected.

(d) [63.180(g)(4)]
An alternative procedure may be used for leak testing the equipment, if the permittee demonstrates the alternative procedure is capable of detecting losses of fluid.

5. [61.355] TEST METHODS, PROCEDURES, AND COMPLIANCE PROVISIONS - 40 CFR Part 61, Subpart FF - National Emission Standard for Benzene Waste Operations

a. [61.355(a)]
The permittee shall determine the total annual benzene quantity from facility waste by the following procedure:

i. [61.355(a)(1)]
For each waste stream subject to 40 CFR Part 61, Subpart FF having a flow-weighted annual average water content greater than 10 percent water, on a volume basis as total water, or is mixed with water or other wastes at any time and the resulting mixture has an annual average water content greater than 10 percent as specified in 40 CFR 61.342(a) [See section A.II.], the permittee shall:

(a) [61.355(a)(1)(i)]
Determine the annual waste quantity for each waste stream using the procedures specified in 40 CFR 61.355(b).

(b) [61.355(a)(1)(ii)]
Determine the flow-weighted annual average benzene concentration for each waste stream using the procedures specified in 40 CFR 61.355(c).

(c) [61.355(a)(1)(iii)]
Calculate the annual benzene quantity for each waste stream by multiplying the annual waste quantity of the waste stream times the flow-weighted annual average benzene concentration.

ii. [61.355(a)(2)]
Total annual benzene quantity from facility waste is calculated by adding together the annual benzene quantity for each waste stream generated during the year and the annual benzene quantity for each process unit turnaround waste annualized according to 40 CFR 61.355(b)(4).

iii. [61.355(a)(3)]
The permittee shall comply with the requirements of 40 CFR 61.342(c) , 40 CFR 61.342(d) , or (e) [See section A.II.].

iv. [61.355(a)(4)]

If the total annual benzene quantity from facility waste is less than 10 Mg/yr (11 ton/yr) but is equal to or greater than 1 Mg/yr (1.1 ton/yr), then the permittee shall:

(a) [61.355(a)(4)(i)]
Comply with the record keeping requirements of 40 CFR 61.356 and reporting requirements of 40 CFR 61.357 [see sections A.III and A.IV]; and

(b) [61.355(a)(4)(ii)]
Repeat the determination of total annual benzene quantity from facility waste at least once per year and whenever there is a change in the process generating the waste that could cause the total annual benzene quantity from facility waste to increase to 10 Mg/yr (11 ton/yr) or more.

v. [61.355(a)(5)]
If the total annual benzene quantity from facility waste is less than 1 Mg/yr (1.1 ton/yr), then the permittee shall:

(a) [61.355(a)(5)(i)]
Comply with the record keeping requirements of 40 CFR 61.356 and reporting requirements of 40 CFR 61.357 [see sections A.III and A.IV]; and

(b) [61.355(a)(5)(ii)]
Repeat the determination of total annual benzene quantity from facility waste whenever there is a change in the process generating the waste that could cause the total annual benzene quantity from facility waste to increase to 1 Mg/yr (1.1 ton/yr) or more.

vi. [61.355(a)(6)]
The benzene quantity in a waste stream that is generated less than one time per year, except as provided for process unit turnaround waste in paragraph (b)(4) of 40 CFR 61.355, shall be included in the determination of total annual benzene quantity from facility waste for the year in which the waste is generated unless the waste stream is otherwise excluded from the determination of total annual benzene quantity from facility waste in accordance with paragraphs (a) through (c) of 40 CFR 61.355. The benzene quantity in this waste stream shall not be annualized or averaged over the time interval between the activities that resulted in generation of the waste, for purposes of determining the total annual benzene quantity from facility waste.

b. [61.355(b)]
For purposes of the calculation required by 40 CFR 61.355(a) [See section A.V], the permittee shall determine the annual waste quantity at the point of waste generation,

unless otherwise provided in 40 CFR 61.355(b)(1), (3), and (4), by one of the methods given in 40 CFR 61.355(b)(5) through (7).

i. [61.355(b)(1)]
The determination of annual waste quantity for sour water streams that are processed in sour water strippers shall be made at the point that the water exits the sour water stripper.

ii. [61.355(b)(3)]
The determination of annual waste quantity for wastes that are received at hazardous waste treatment, storage, or disposal facilities from offsite shall be made at the point where the waste enters the hazardous waste treatment, storage, or disposal facility.

iii. [61.355(b)(4)]
The determination of annual waste quantity for each process unit turnaround waste generated only at 2 year or greater intervals, may be made by dividing the total quantity of waste generated during the most recent process unit turnaround by the time period (in the nearest tenth of a year) between the turnaround resulting in generation of the waste and the most recent preceding process turnaround for the unit. The resulting annual waste quantity shall be included in the calculation of the annual benzene quantity as provided in 40 CFR 61.355(a)(1)(iii) for the year in which the turnaround occurs and for each subsequent year until the unit undergoes the next process turnaround. For estimates of total annual benzene quantity as specified in the 90-day report, required under 40 CFR 61.357(a)(1) [See section A.IV.], the permittee shall estimate the waste quantity generated during the most recent turnaround, and the time period between turnarounds in accordance with good engineering practices. If the permittee chooses not to annualize process unit turnaround waste, as specified in this paragraph, then the process unit turnaround waste quantity shall be included in the calculation of the annual benzene quantity for the year in which the turnaround occurs.

iv. [61.355(b)(5)]
Select the highest annual quantity of waste managed from historical records representing the most recent 5 years of operation or, if the facility has been in service for less than 5 years but at least 1 year, from historical records representing the total operating life of the facility;

v. [61.355(b)(6)]
Use the maximum design capacity of the waste management unit; or

vi. [61.355(b)(7)]
Use measurements that are representative of maximum waste generation rates.

c. [61.355(c)]

For the purposes of the calculation required by 40 CFR 61.355(a), the permittee shall determine the flow-weighted annual average benzene concentration in a manner that meets the requirements given in paragraph (c)(1) of 40 CFR 61.355 using either of the methods given in paragraphs (c)(2) and (c)(3) of 40 CFR 61.355.

i. [61.355(c)(1)]
The determination of flow-weighted annual average benzene concentration shall meet all of the following criteria:

(a) [61.355(c)(1)(i)]
The determination shall be made at the point of waste generation except for the specific cases given in paragraphs (c)(1)(i)(A) through (D) of 40 CFR 61.355.

(i) [61.355(c)(1)(i)(A)]
The determination for sour water streams that are processed in sour water strippers shall be made at the point that the water exits the sour water stripper.

(ii) [61.355(c)(1)(i)(C)]
The determination for wastes that are received from offsite shall be made at the point where the waste enters the hazardous waste treatment, storage, or disposal facility.

(iii) [61.355(c)(1)(i)(D)]
The determination of flow-weighted annual average benzene concentration for process unit turnaround waste shall be made using either of the methods given in paragraph (c)(2) or (c)(3) of 40 CFR 61.355. The resulting flow-weighted annual average benzene concentration shall be included in the calculation of annual benzene quantity as provided in paragraph (a)(1)(iii) of 40 CFR 61.355 for the year in which the turnaround occurs and for each subsequent year until the unit undergoes the next process unit turnaround.

(b) [61.355(c)(1)(ii)]
Volatilization of the benzene by exposure to air shall not be used in the determination to reduce the benzene concentration.

(c) [61.355(c)(1)(iii)]
Mixing or diluting the waste stream with other wastes or other materials shall not be used in the determination to reduce the benzene concentration.

(d) [61.355(c)(1)(iv)]

The determination shall be made prior to any treatment of the waste that removes benzene, except as specified in paragraphs (c)(1)(i)(A) through (D) of 40 CFR 61.355.

(e) [61.355(c)(1)(v)]
For wastes with multiple phases, the determination shall provide the weighted-average benzene concentration based on the benzene concentration in each phase of the waste and the relative proportion of the phases.

ii. [61.355(c)(2)]
*Knowledge of the waste.* The permittee shall provide sufficient information to document the flow-weighted annual average benzene concentration of each waste stream. Examples of information that could constitute knowledge include material balances, records of chemicals purchases, or previous test results provided the results are still relevant to the current waste stream conditions. If test data are used, then the permittee shall provide documentation describing the testing protocol and the means by which sampling variability and analytical variability were accounted for in the determination of the flow-weighted annual average benzene concentration for the waste stream. When a permittee and the Administrator do not agree on determinations of the flow-weighted annual average benzene concentration based on knowledge of the waste, the procedures under 40 CFR 61.355(c)(3) shall be used to resolve the disagreement.

iii. [61.355(c)(3)]
Measurements of the benzene concentration in the waste stream in accordance with the following procedures:

(a) [61.355(c)(3)(i)]
Collect a minimum of three representative samples from each waste stream. Where feasible, samples shall be taken from an enclosed pipe prior to the waste being exposed to the atmosphere.

(b) [61.355(c)(3)(ii) and (c)(3)(ii)(A) through (H)]
For waste in enclosed pipes, the following procedures shall be used:

(i) Samples shall be collected prior to the waste being exposed to the atmosphere in order to minimize the loss of benzene prior to sampling.

(ii) A static mixer shall be installed in the process line or in a by-pass line unless the permittee demonstrates that installation of a static mixer in the line is not necessary to accurately determine the benzene concentration of the waste stream.

(iii) The sampling tap shall be located within two pipe diameters of the static mixer outlet.

(iv) Prior to the initiation of sampling, sample lines and cooling coil shall be purged with at least four volumes of waste.

(v) After purging, the sample flow shall be directed to a sample container and the tip of the sampling tube shall be kept below the surface of the waste during sampling to minimize contact with the atmosphere.

(vi) Samples shall be collected at a flow rate such that the cooling coil is able to maintain a waste temperature less than 10°C.

(vii) After filling, the sample container shall be capped immediately (within 5 seconds) to leave a minimum headspace in the container.

(viii) The sample containers shall immediately be cooled and maintained at a temperature below 10°C for transfer to the laboratory.

(c) [61.355(c)(3)(iii)]
When sampling from an enclosed pipe is not feasible, a minimum of three representative samples shall be collected in a manner to minimize exposure of the sample to the atmosphere and loss of benzene prior to sampling.

(d) [61.355(c)(3)(iv) and (c)(3)(iv)(A) through (F)]
Each waste sample shall be analyzed using one of the following test methods for determining the benzene concentration in a waste stream:

(i) Method 8020, Aromatic Volatile Organics, in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in 40 CFR 61.18);

(ii) Method 8021, Volatile Organic Compounds in Water by Purge and Trap Capillary Column Gas Chromatography with Photoionization and Electrolytic Conductivity Detectors in Series in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in 40 CFR 61.18);

(iii) Method 8240, Gas Chromatography/Mass Spectrometry for Volatile Organics in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No.

SW-846 (incorporation by reference as specified 40 CFR 61.18);

(iv) Method 8260, Gas Chromatography/Mass Spectrometry for Volatile Organics: Capillary Column Technique in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in 40 CFR 61.18);

(v) Method 602, Purgeable Aromatics, as described in 40 CFR part 136, Appendix A, Test Procedures for Analysis of Organic Pollutants, for wastewaters for which this is an approved EPA methods; or

(vi) Method 624, Purgeables, as described in 40 CFR part 136, Appendix A, Test Procedures for Analysis of Organic Pollutants, for wastewaters for which this is an approved EPA method.

(e) [61.355(c)(3)(v)]
The flow-weighted annual average benzene concentration shall be calculated by averaging the results of the sample analyses as follows:

$$C ? 1 / Q_t ? \sum_{i?1}^{n} (Q_i ? C_i)$$

where:

C = Flow-weighted annual average benzene concentration for waste stream, ppmw;
$Q_t$ = Total annual waste quantity for waste stream, kg/yr (lb/yr);
n = Number of waste samples (at least 3);
$Q_i$ = Annual waste quantity for waste stream represented by $C_i$, kg/yr (lb/yr); and
$C_i$ = Measured concentration of benzene in waste sample i, ppmw.

d. [61.355(d)]
A permittee using performance tests to demonstrate compliance of a treatment process with 40 CFR 61.348(a)(1)(i) [See section A.II.] shall measure the flow-weighted annual average benzene concentration of the waste stream exiting the treatment process by collecting and analyzing a minimum of three representative samples of the waste stream using the procedures in 40 CFR 61.355(c)(3). The test shall be conducted under conditions that exist when the treatment process is operating at the highest inlet waste stream flow rate and benzene content expected to occur. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a test. The permittee shall record all

process information as is necessary to document the operating conditions during the test.

e. [61.355(e)]
The permittee using performance tests to demonstrate compliance of a treatment process with 40 CFR 61.348(a)(1)(ii) [See section A.II] shall determine the percent reduction of benzene in the waste stream on a mass basis by the following procedure:

i. [61.355(e)(1)]
The test shall be conducted under conditions that exist when the treatment process is operating at the highest inlet waste stream flow rate and benzene content expected to occur. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a test. The permittee shall record all process information as is necessary to document the operating conditions during the test.

ii. [61.355(e)(2)]
All testing equipment shall be prepared and installed as specified in the appropriate test methods.

iii. [61.355(e)(3)]
The mass flow rate of benzene entering the treatment process ($E_b$) shall be determined by computing the product of the flow rate of the waste stream entering the treatment process, as determined by the inlet flow meter, and the benzene concentration of the waste stream, as determined using the sampling and analytical procedures specified in paragraph (c)(2) or (c)(3) of 40 CFR 61.355. Three grab samples of the waste shall be taken at equally spaced time intervals over a 1-hour period. Each 1-hour period constitutes a run, and the performance test shall consist of a minimum of 3 runs conducted over a 3-hour period. The mass flow rate of benzene entering the treatment process is calculated as follows:

$$E_b ? K / (n ? 10^6) ? [\overset{n}{\underset{i ? 1}{?}} V_i C_i]$$

where:

$E_b$ = Mass flow rate of benzene entering the treatment process, kg/hour;
K = Density of the waste stream, kg/m$^3$ (lb/ft$^3$);
$V_i$ = Average volume flow rate of waste entering the treatment process during each run i, m$^3$hour (ft$^3$);
$C_i$ = Average concentration of benzene in the waste stream entering the treatment process during each run i, ppmw;
n = Number of runs; and
$10^6$ = Conversion for ppmw.

iv. [61.355(e)(4)]

The mass flow rate of benzene exiting the treatment process ($E_a$) shall be determined by computing the product of the flow rate of the waste stream exiting the treatment process, as determined by the outlet flow meter or the inlet flow meter, and the benzene concentration of the waste stream, as determined using the sampling and analytical procedures specified in paragraph (c)(2) or (c)(3) of 40 CFR 61.355. Three grab samples of the waste shall be taken at equally spaced time intervals over a 1-hour period. Each 1-hour period constitutes a run, and the performance test shall consist of a minimum of 3 runs conducted over the same 3-hour period at which the mass flow rate of benzene entering the treatment process is determined. The mass flow rate of benzene exiting the treatment process is calculated as follows:

$$E_a = K / (n \times 10^6) \times [\sum_{i=1}^{n} V_i C_i]$$

where:

$E_a$ = Mass flow rate of benzene exiting the treatment process, kg/hour (lb/hr);
K = Density of the waste stream, kg/m$^3$ (lb/ft$^3$);
$V_i$ = Average volume flow rate of waste exiting the treatment process during each run i, m$^3$/hour (ft$^3$/hr);
$C_i$ = Average concentration of benzene in the waste stream exiting the treatment process during each run i, ppmw;
n = Number of runs; and
$10^6$ = Conversion factor for ppmw.

f. [61.355(f)]
The permittee using performance tests to demonstrate compliance of a treatment process with 40 CFR 61.348(a)(1)(iii) [See section A.II] shall determine the benzene destruction efficiency for the combustion unit by the following procedure:

i. [61.355(f)(1)]
The test shall be conducted under conditions that exist when the combustion unit is operating at the highest inlet waste stream flow rate and benzene content expected to occur. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a test. The permittee shall record all process information necessary to document the operating conditions during the test.

ii. [61.355(f)(2)]
All testing equipment shall be prepared and installed as specified in the appropriate test methods.

iii. [61.355(f)(3)]
The mass flow rate of benzene entering the combustion unit shall be determined by computing the product of the flow rate of the waste stream entering the combustion unit, as determined by the inlet flow meter, and the

benzene concentration of the waste stream, as determined using the sampling procedures in paragraph (c)(2) or (c)(3) of 40 CFR 61.355. Three grab samples of the waste shall be taken at equally spaced time intervals over a 1-hour period. Each 1-hour period constitutes a run, and the performance test shall consist of a minimum of 3 runs conducted over a 3-hour period. The mass flow rate of benzene into the combustion unit is calculated as follows:

$$E_b = K / (n \times 10^6) \times [\sum_{i=1}^{n} V_i C_i]$$

where:

$E_b$ = Mass flow rate of benzene into the combustion unit, kg/hour (lb/hr);
K = Density of the waste stream, kg/m$^3$ (lb/ft$^3$);
$V_i$ = Average volume flow rate of waste entering the combustion unit during each run i, m$^3$/hour (ft$^3$/hr);
$C_i$ = Average concentration of benzene in the waste stream entering the combustion unit during each run i, ppmw;
n = Number of runs; and
$10^6$ = Conversion for ppmw.

iv. [61.355(f)(4)]
The mass flow rate of benzene exiting the combustion unit exhaust stack shall be determined as follows:

(a) [61.355(f)(4)(i)]
The time period for the test shall not be less than 3 hours during which at least 3 stack gas samples are collected and be the same time period at which the mass flow rate of benzene entering the treatment process is determined. Each sample shall be collected over a 1-hour period (e.g., in a tedlar bag) to represent a time-integrated composite sample and each 1-hour period shall correspond to the periods when the waste feed is sampled.

(b) [61.355(f)(4)(ii)]
A run shall consist of a 1-hour period during the test. For each run:

(i) [61.355(f)(4)(ii)(A)]
The reading from each measurement shall be recorded;

(ii) [61.355(f)(4)(ii)(B)]
The volume exhausted shall be determined using method 2, 2A, 2C, or 2D from Appendix A of 40 CFR part 60, as appropriate.

(iii) [61.355(f)(4)(ii)(C)]

The average benzene concentration in the exhaust downstream of the combustion unit shall be determined using method 18 from Appendix A of 40 CFR part 60.

(c) [61.355(f)(4)(iii)]
The mass of benzene emitted during each run shall be calculated as follows:

$M_i = D_b VC(10^{-6})$

where:

$M_i$ = Mass of benzene emitted during run i, kg (lb);
V = Volume of air-vapor mixture exhausted at standard conditions, $m^3$ ($ft^3$);
C = Concentration of benzene measured in the exhaust, ppmv;
$D_b$ = Density of benzene = 3.24 $kg/m^3$ (0.202 $lb/ft^3$); and
$10^{-6}$ = Conversion factor for ppmv.

(d) [61.355(f)(4)(iv)]
The benzene mass emission rate in the exhaust shall be calculated as follows:

$$E_a ? (? \sum_{i?1}^{n} M_i) / T$$

where:

$E_a$ = Mass flow rate of benzene emitted, kg/hour lb/hr);
$M_i$ = Mass of benzene emitted during run i, kg (lb);
T = Total time of all runs, hour; and
n = Number of runs.

v. [61.355(f)(5)]
The benzene destruction efficiency for the combustion unit shall be calculated as follows:

$$R ? (E_b ? E_a) / E_b ? 100$$

where:

R = Benzene destruction efficiency for the combustion unit, percent;
$E_b$ = Mass flow rate of benzene into the combustion unit, kg/hour (lb/hr); and
$E_a$ = Mass flow of benzene from the combustion unit, kg/hour (lb/hr).

g. [61.355(g)]
A permittee using performance tests to demonstrate compliance of a wastewater treatment system unit with 61.348(b) [See section A.II.] shall measure the flow-weighted annual average benzene concentration of the wastewater stream where the waste stream enters an exempt waste management unit by collecting and analyzing a minimum of three representative samples of the waste stream using the procedures in 40 CFR 61.355(c)(3). The test shall be conducted under conditions that exist when the wastewater treatment system is operating at the highest inlet wastewater stream flow rate and benzene content expected to occur. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a test. The permittee shall record all process information as is necessary to document the operating conditions during the test.

h. [61.355(h)]
The permittee shall test equipment for compliance with no detectable emissions as required in 40 CFR 61.343 through 61.347 and 61.349 [see sections A.II and A.III.] in accordance with the following requirements:

i. [61.355(h)(1)]
Monitoring shall comply with Method 21 from Appendix A of 40 CFR Part 60.

ii. [61.355(h)(2)]
The detection instrument shall meet the performance criteria of Method 21.

iii. [61.355(h)(3)]
The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21.

iv. [61.355(h)(4); (h)(4)(i) and (4)(ii)]
Calibration gases shall be with zero air (less than 10 ppm of hydrocarbon in air); and a mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

v. [61.355(h)(5)]
The background level shall be determined as set forth in Method 21.

vi [61.355(h)(6)]
The instrument probe shall be traversed around all potential leak interfaces as close as possible to the interface as described in Method 21.

vii. [61.355(h)(7)]
The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared to 500 ppm for determining compliance.

i. [61.355(i)]
A permittee using a performance test to demonstrate compliance of a control device with either the organic reduction efficiency requirement or the benzene reduction efficiency requirement specified under 40 CFR 61.349(a)(2) [See section A.II.] shall use the following procedures:

i. [61.355(i)(1)]
The test shall be conducted under conditions that exist when the waste management unit vented to the control device is operating at the highest load or capacity level expected to occur. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a test. The permittee shall record all process information necessary to document the operating conditions during the test.

ii. [61.355(i)(2)]
Sampling sites shall be selected using Method 1 or 1A from 40 CFR Part 60, Appendix A, as appropriate.

iii. [61.355(i)(3)]
The mass flow rate of either the organics or benzene entering and exiting the control device shall be determined as follows:

(a) [61.355(i)(3)(i)]
The time period for the test shall not be less than 3 hours during which at least 3 stack gas samples are collected. Samples of the vent stream entering and exiting the control device shall be collected during the same time period. Each sample shall be collected over a 1-hour period (e.g., in a tedlar bag) to represent a time-integrated composite sample.

(b) [61.355(i)(3)(ii) and (i)(3)(ii)(A) through (C)]
A run shall consist of a 1-hour period during the test. For each run:

(i) The reading from each measurement shall be recorded;

(ii) The volume exhausted shall be determined using Method 2, 2A, 2C, or 2D from 40 CFR Part 60, Appendix A, as appropriate;

(iii) The organic concentration or the benzene concentration, as appropriate, in the vent stream entering and exiting the control shall be determined using Method 18 from 40 CFR Part 60, Appendix A.

(c) [61.355(i)(3)(iii)]
The mass of organics or benzene entering and exiting the control device during each run shall be calculated as follows:

$$M_{aj} ? (K_1 V_{aj}) / 10^6 ) ? (\overset{n}{\underset{i?1}{?}} C_{ai} MW_i)$$

$$M_{bj} ? (K_1 V_{bj}) / 10^6 ) ? (\overset{n}{\underset{i?1}{?}} C_{bi} MW_i)$$

where:

$M_a$ = Mass of organics or benzene in the vent stream entering the control device during run j, kg(lb);
$M_{bj}$ = Mass of organics or benzene in vent stream exiting the control device during run j, kg(lb);
$V_{aj}$ = Volume of vent stream entering the control device during run j at standards conditions, $m^3(ft^3)$;
$V_{bj}$ = Volume of vent stream exiting the control device during run j at standards conditions, $m^3(ft^3)$;
$C_{ai}$ = Organic concentration of compound i or benzene concentration measured in the vent stream entering the control device as determined by Method 18, ppm by volume on a dry basis;
$C_{bi}$ = Organic concentration of compound i measured in the vent stream exiting the control device as determined by method 18, ppm by volume on a dry basis;
$MW_i$ = Molecular weight of organic compound i in the vent stream or molecular weight of benzene, kg/kg-mo1(lb/lb-mole);
n = Number of organic compounds in the vent stream; if benzene reduction efficiency is being demonstrated, then n=1;
$K_1$ = Conversion factor for molar volume=0.0416 kg-mol/$m^3$ (at 293°K and 760 mm Hg(527 R and 14.7 psia)). = 0.0416 kg-mol/$m^3$ (0.00118lb-mol/$ft^3$); and
$10^{-6}$ = Conversion factor for ppmv.

(d) [61.355(i)(3)(iv)]
The mass flow rate of organics or benzene entering and exiting the control device shall be calculated using as follows:

$$E_a ? (\overset{n}{\underset{j?1}{?}} M_{aj}) / T$$

$$E_b ? (\overset{n}{\underset{j?1}{?}} M_{bj}) / T$$

$E_a$ = Mass flow rate of organics or benzene entering the control device, kg/hr (lb/hr);
$E_b$ = Mass flow rate of organics or benzene exiting the control device, kg/hr (lb/hr);

$M_{aj}$ = Mass of organics or benzene in the vent stream entering the control device during run j, kg (lb);
$M_{bj}$ = Mass of organics or benzene in vent stream exiting the control device during run j, kg (lb);
T = Total time of all runs, hour; and
n = Number of runs.

iv. [61.355(i)(4)]

The organic reduction efficiency for the control device shall be calculated as follows:

R = [(Ea - Eb) / Ea ] x 100

where:

R = Total organic reduction efficiency or benzene reduction efficiency for the control device, percent;
$E_a$ = Mass flow rate of organics or benzene entering the control device, kg/hr (lb/hr); and
$E_b$ = Mass flow rate of organics or benzene emitted from the control device, kg/hr (lb/hr).

j. [61.355(j)]
A permittee shall determine the benzene quantity for the purposes of the calculation required by 40 CFR 61.342(c)(3)(ii)(B) [See section A.II.], according to the provisions of 40 CFR 61.355(a) [See section A.V], except that the procedures in 40 CFR 61.355(a) shall also apply to wastes with a water content of 10 percent or less.

k. [61.355(k)]
The permittee shall determine the benzene quantity for the purposes of the calculation required by 40 CFR 61.342(e)(2) [See section A.II] by the following procedure:

i. [61.355(k)(1)]

For each waste stream that is not controlled for air emissions in accordance with 40 CFR 61.343. 61.344, 61.345, 61.346, 61.347, or 61.348(a), as applicable to the waste management unit that manages the waste, the benzene quantity shall be determined as specified in paragraph (a) of 40 CFR 61.355, except that paragraph (b)(4) of 40 CFR 61.355 shall not apply, i.e., the waste quantity for process unit turnaround waste is not annualized but shall be included in the determination of benzene quantity for the year in which the waste is generated for the purposes of the calculation required by 40 CFR 61.342(e)(2).

ii. [61.355(k)(2)]

For each waste stream that is controlled for air emissions in accordance with 40 CFR 61.343. 61.344, 61.345, 61.346, 61.347, or 61.348(a) [See section A.II], as applicable to the waste management unit that manages the waste, the determination of annual waste quantity and flow-weighted annual average benzene concentration shall be made at the first applicable location as described in paragraphs (k)(2)(i), (k)(2)(ii), and (k)(2)(iii) of 40 CFR 61.355 and prior to any reduction of benzene concentration through volatilization of the benzene, using the methods given in (k)(2)(iv) and (k)(2)(v) of 40 CFR 61.355.

(a) [61.355(k)(2)(i)]
where the waste stream enters the first waste management unit not complying with 40 CFR 61.343, 61.344, 61.345, 61.346, 61.347, and 61.348(a) that are applicable to the waste management unit,

(b) [61.355(k)(2)(ii)]
For each waste stream that is managed or treated only in compliance with 40 CFR 61.343 through 61.348(a) up to the point of final direct discharge from the facility, the determination of benzene quantity shall be prior to any reduction of benzene concentration through volatilization of the benzene, or

(c) [61.355(k)(2)(iii)]
For wastes managed in units controlled for air emissions in accordance with 40 CFR 61.343, 61.344, 61.345, 61.346, 61.347, and 61.348(a), and then transferred offsite, facilities shall use the first applicable offsite location as described in paragraphs (k)(2)(i) and (k)(2)(ii) of 40 CFR 61.355 if they have documentation from the offsite facility of the benzene quantity at this location. Facilities without this documentation for offsite wastes shall use the benzene quantity determined at the point where the transferred waste leaves the facility.

(d) [61.355(k)(2)(iv)]
Annual waste quantity shall be determined using the procedures in paragraphs (b)(5), (6), or (7) of 40 CFR 61.355, and

(e) [61.355(k)(2)(v)]
The flow-weighted annual average benzene concentration shall be determined using the procedures in paragraphs (c)(2) or (3) of 40 CFR 61.355.

iii. [61.355(k)(3)]
The benzene quantity in a waste stream that is generated less than one time per year, including process unit turnaround waste, shall be included in the determination of benzene quantity as determined in paragraph (k)(6) of 40 CFR 61.355 for the year in which the waste is generated. The benzene quantity in this waste stream shall not be annualized or averaged over the time

interval between the activities that resulted in generation of the waste for purposes of determining benzene quantity as determined in paragraph (k)(6) 40 CFR 61.355.

iv. [61.355(k)(4)]
The benzene in waste entering an enhanced biodegradation unit, as defined in 40 CFR 61.348(b)(2)(ii)(B) [See section A.II], shall not be included in the determination of benzene quantity, determined in paragraph (k)(6) of 40 CFR 61.355, if the following conditions are met:

(a) [61.355(k)(4)(i)]
The benzene concentration for each waste stream entering the enhanced biodegradation unit is less than 10 ppmw on a flow-weighted annual average basis, and

(b) [61.355(k)(4)(ii)]
All prior waste management units managing the waste comply with 40 CFR 61.343, 61.344, 61.345, 61.346, 61.347 and 61.348(a) [See section A.II].

v. [61.355(k)(5)]
The benzene quantity for each waste stream in paragraph (k)(2) of 40 CFR 61.355 shall be determined by multiplying the annual waste quantity of each waste stream times its flow-weighted annual average benzene concentration.

vi. [61.355(k)(6)]
The total benzene quantity for the purposes of the calculation required by 40 CFR 61.342(e)(2) [See section A.II] shall be determined by adding together the benzene quantities determined in paragraphs (k)(1) and (k)(5) of 40 CFR 61.355 for each applicable waste stream.

vii. [40 CFR 61.355(k)(7)]
If the benzene quantity determined in paragraph (6) of 40 CFR 61.355 exceeds 6.0 Mg/yr (6.6 ton/yr) only because of multiple counting of the benzene quantity for a waste stream, the permittee may use the following procedures for the purposes of the calculation required by 40 CFR 61.342(e)(2) [See section A.II]:

(a) [61.355(k)(7)(i)]
Determine which waste management units are involved in the multiple counting of benzene;

(b) [61.355(k)(7)(ii)]
Determine the quantity of benzene that is emitted, recovered, or removed from the affected units identified in paragraph (k)(7)(i) of 40 CFR 61.355, or destroyed in the units if applicable, using either direct

measurements or the best available estimation techniques developed or approved by the Administrator of USEPA.

(c) [61.355(k)(7)(iii)]
Adjust the benzene quantity to eliminate the multiple counting of benzene based on the results from paragraph (k)(7)(ii) of 40 CFR 61.355 and determine the total benzene quantity for the purposes of the calculation required by 40 CFR 61.342(e)(2).

(d) [61.355(k)(7)(iv)]
Submit in the annual report required under 40 CFR 61.357(a) [See section A.IV] a description of the methods used and the resulting calculations for the alternative procedure under paragraph (k)(7) of 40 CFR 61.355, the benzene quantity determination from paragraph (k)(6) of 40 CFR 61.355, and the adjusted benzene quantity determination from paragraph (k)(7)(iii) of 40 CFR 61.355.

6. [OAC rule 3745-21-09(T)(1)(a)] METHOD FOR THE DETECTION OF LEAKS OF VOC COMPOUNDS FROM PETROLEUM REFINERY EQUIPMENT

a. [OAC rule 3745-21-10(F)]
Method for Detection of leaks of VOC from petroleum refinery equipment

i. [OAC rule 3745-21-10(F)(1)]
This method is applicable to the detection of leaks of volatile organic compounds into the ambient air from petroleum refinery equipment and any chemical manufacturing equipment subject to paragraph (T) or (DD) of rule 3745-21-09 of the Ohio Administrative Code.

ii. [OAC rule 3745-21-10(F)(2)]
The detection of leaks shall be determined in accordance with the test procedure set forth in "Method 21, 40 CFR, Part 60, Appendix A."

iii. [OAC rule 3745-21-10(F)(3)]
The calibration gases shall be:

(a) Zero air, which consists of less than ten ppmv of hydrocarbon in air; and

(b) A mixture of air and methane or n-hexane at a concentration of approximately, but less than, ten thousand ppmv of methane or n-hexane.

iv. [OAC rule 3745-21-10(F)(4)]
The leak detection instrument shall be calibrated before use on each day of its use.

7. Testing requirements for Refinery Flares

a. The permittee shall conduct, or have conducted, emission testing for the TIU Acid Gas Flare, East Flare, West Flare, and the TRP SRU Acid Gas Flare in accordance with the following requirements:

i. The emission testing shall be conducted every 2.5 years after the effective date of this permit.

ii. The emission testing shall be conducted to demonstrate compliance with the following: no visible emissions, except for 5 minutes during any 2 consecutive hours for the TIU Acid Gas Flare, East Flare, West Flare, and the TRP SRU Acid Gas Flare; the minimum heating value 300 Btu per standard cubic foot of gas being combusted for P003 and P004; and, the maximum exit velocity requirement of less than 60 feet per second for the East Flare, West Flare, and the TRP SRU Acid Gas Flare.

iii. The following test method(s) shall be employed to demonstrate compliance with the above requirements:

(a) Method 22 of 40 CFR Part 60, Appendix A for visible emissions with an observation period of 2 hours;

(b) OAC rule 3745-21-10(P)(2) for the net heating value of gas combusted; and,

(c) OAC rule 3745-10(P)(3) for the actual exit velocity.

b. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Toledo Division of Environmental Services.

c. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Toledo Division of Environmental Services's refusal to accept the results of the emission test(s).

d. Personnel from the Toledo Division of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

e. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Toledo Division of Environmental Services within 30 days following completion of the test(s).

## VI. Miscellaneous Requirements

1. GENERAL PROVISIONS OF 40 CFR Part 63, Subpart A:

a. [63.6(e)]
Operation and maintenance requirements.

i. (a) [63.6(e)(1)(i)]
At all times, including periods of startup, shutdown, and malfunction, the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions to the levels required by the relevant standards, i.e., meet the emission standard or comply with the startup, shutdown, and malfunction plan. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan required in 40 CFR 63.6(e)(3)), review of operation and maintenance records, and inspection of the source.

(b) [63.6(e)(1)(ii)]
Malfunctions must be corrected as soon as practicable after their occurrence in accordance with the startup, shutdown, and malfunction plan required in 40 CFR 63.6(e)(3). To the extent that an unexpected event arises during a startup, shutdown, or malfunction, the permittee must comply by minimizing emissions during such a startup, shutdown, and malfunction event consistent with safety and good air pollution control practices.

(c) [63.6(e)(1)(iii)]
Operation and maintenance requirements established pursuant to section 112 of the Clean Air Act as amended in 1990 are enforceable independent of emissions limitations or other requirements in relevant standards.

ii. [63.6(e)(3)(i), (3)(ii), and (3)(vi) through (3)(viii)]
*Startup, Shutdown, and Malfunction Plan*.

(a) [63.6(e)(3)(i)]

The permittee of an affected source must develop and implement a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction; a program of corrective action for malfunctioning process; and air pollution control and monitoring equipment used to comply with the relevant standard. This plan must be developed by the permittee by the source's compliance date for that relevant standard. The purpose of the startup, shutdown, and malfunction plan is to:

(i) [63.6(e)(3)(i)(A)]
Ensure that, at all times, the permittee operate and maintain affected sources, including associated air pollution control and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions to the levels required by the relevant standards; and

(ii) [63.6(e)(3)(i)(B)]
Reduce the reporting burden associated with periods of startup, shutdown, and malfunction (including corrective action taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation).

(b) [63.6(e)(3)(ii)]
During periods of startup, shutdown, and malfunction, the permittee of an affected source shall operate and maintain such source (including associated air pollution control equipment) in accordance with the procedures specified in the startup, shutdown, and malfunction plan developed under 40 CFR 63.6(e)(3)(1).

(c) When actions taken by the permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) are consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, the permittee must keep records for that event which demonstrate that the procedures specified in the plan were followed. These records may take the form of a "checklist," or other effective form of record keeping that confirms conformance with the startup, shutdown, and malfunction plan for that event. In addition, the permittee must keep records of these events as specified in 40 CFR 63.10(b), including records of the occurrence and duration of each startup, shutdown, or malfunction of operation and each malfunction of the air pollution control and monitoring equipment. Furthermore, the permittee shall confirm that actions taken during the relevant reporting period during periods of startup, shutdown, and malfunction were consistent with the affected source's startup, shutdown and malfunction plan in the semiannual (or more

frequent) startup, shutdown, and malfunction report required in 40 CFR 63.10(d)(5).

(d) [63.6(e)(3)(iv)]
If an action taken by the permittee during a startup, shutdown, or malfunction (including an action taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, and the source exceeds the relevant emission standard, then the permittee must record the actions taken for that event and must report such actions within 2 working days after commencing actions inconsistent with the plan, followed by a letter within 7 working days after the end of the event, in accordance with 40 CFR 63.10(d)(5) (unless the permittee makes alternative reporting arrangements, in advance, with the Administrator).

(e) [63.6(e)(3)(v)]
The permittee must maintain at the affected source a current startup, shutdown, and malfunction plan and must make the plan available upon request for inspection and copying by the Administrator. In addition, if the startup, shutdown, and malfunction plan is subsequently revised as provided in 40 CFR 63.6(e)(3)(viii), the permittee must maintain at the affected source each previous (i.e., superseded) version of the startup, shutdown, and malfunction plan, and must make each such previous version available for inspection and copying by the Administrator for a period of 5 years after revision of the plan. If at any time after adoption of a startup, shutdown, and malfunction plan the affected source ceases operation or is otherwise no longer subject to the provisions of 40 CFR Part 63, the permittee must retain a copy of the most recent plan for 5 years from the date the source ceases operation or is no longer subject to this part and must make the plan available upon request for inspection and copying by the Administrator.

(f) [63.6(e)(3)(vi)]
To satisfy the requirements of 40 CFR 63.6 to develop a startup, shutdown, and malfunction plan, the permittee may use the affected source's standard operating procedures (SOP) manual, or an Occupational Safety and Health Administration (OSHA) or other plan, provided the alternative plans meet all the requirements of 40 CFR 63.6 and are made available for inspection when requested by the Administrator.

(g) [63.6(e)(3)(vii)]
Based on the results of a determination made under 40 CFR 63.6(e)(2), the Administrator may require that the permittee of an affected source make changes to the startup, shutdown, and malfunction plan for that source. The Administrator may require reasonable revisions to a

startup, shutdown, and malfunction plan, if the Administrator finds that the plan:

(i) [63.6(e)(3)(vii)(A)]
Does not address a startup, shutdown, or malfunction event that has occurred;

(ii) [63.6(e)(3)(vii)(B)]
Fails to provide for the operation of the source (including associated air pollution control and monitoring equipment) during a startup, shutdown, or malfunction event in a manner consistent with safety and good air pollution control practices for minimizing emissions to the levels required by the relevant standards;

(iii) [63.6(e)(3)(vii)(C)]
Does not provide adequate procedures for correcting malfunctioning process and/or air pollution control and monitoring equipment as quickly as practicable; or

(iv) [63.6(e)(3)(vii)(D)]
Includes an event that does not meet the definition of startup, shutdown, or malfunction listed in 40 CFR 63.2.

(h) [63.6(e)(3)(viii)]
The permittee may periodically revise the startup, shutdown, and malfunction plan for the affected source as necessary to satisfy the requirements of 40 CFR Part 63 or to reflect changes in equipment or procedures at the affected source. Unless the permitting authority provides otherwise, the permittee may make such revisions to the startup, shutdown, and malfunction plan without prior approval by the Administrator or the permitting authority. However, each such revision to a startup, shutdown, and malfunction plan must be reported in the semiannual report required by 40 CFR 63.10(d)(5). If the startup, shutdown, and malfunction plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction but was not included in the startup, shutdown, and malfunction plan at the time the permittee developed the plan, the permittee must revise the startup, shutdown, and malfunction plan within 45 days after the event to include detailed procedures for operating and maintaining the source during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control and monitoring equipment. In the event that the permittee makes any revision to the startup, shutdown, and malfunction plan which alters the scope of the activities at the source which are deemed to be a startup, shutdown, malfunction, or otherwise modifies the applicability of any emission limit, work practice requirement, or other requirement

in a standard established under this part, the revised plan shall not take effect until after the permittee has provided a written notice describing the revision to the permitting authority.

(i) [63.6(e)(3)(ix)]
The title V permit for an affected source must require that the permittee adopt a startup, shutdown, and malfunction plan which conforms to the provisions of 40 CFR Part 63, and that the permittee operate and maintain the source in accordance with the procedures specified in the current startup, shutdown, and malfunction plan. However, any revisions made to the startup, shutdown, and malfunction plan in accordance with the procedures established by this part shall not be deemed to constitute permit revisions under 40 CFR Part 70 or Part 71. Moreover, none of the procedures specified by the startup, shutdown, and malfunction plan for an affected source shall be deemed to fall within the permit shield provision in section 504(f) of the Clean Air Act.

b. [63.10(a)(4)(ii)]
After a State has been delegated the authority to implement and enforce record keeping and reporting requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit reports to the delegated State authority (which may be the same as the permitting authority). In addition, if the delegated (permitting) authority is the State, the owner or operator shall send a copy of each report submitted to the State to the appropriate Regional Office of the EPA, (to the attention of the Director of the Division indicated in the list of the EPA Regional Offices in 40 CFR 63.13). The Regional Office may waive this requirement for any reports at its discretion.

c. [63.11(a)]
*Control device requirements.* Applicability. 40 CFR 63.11 contains requirements for control devices used to comply with provisions in relevant standards. These requirements apply only to affected sources covered by relevant standards referring directly or indirectly to this section.

d. [63.13]
Addresses of State air pollution control agencies and EPA Regional Offices.

i. [63.13(a)]
All requests, reports, applications, submittals, and other communications to the Administrator pursuant to 40 CFR Part 63 shall be submitted to Ohio EPA, Division of Air Pollution Control, Attn: Bob Hodanbosi, Lazarus Government Center, PO Box 1049, Columbus, OH 43216-6515.

ii. [63.13(b)]
All information required to be submitted to the Administrator under 40 CFR Part 63 also shall be submitted to the Toledo Division of Environmental

Services, 348 S. Erie St., Toledo, Ohio 43602, to which authority has been delegated under section 112(l) of the Clean Air Act as amended in 1990.

iii. [63.13(c)]
If any State requires a submittal that contains all the information required in an application, notification, request, report, statement, or other communication required in this part, the permittee may send the appropriate Regional Office of the EPA a copy of that submittal to satisfy the requirements of 40 CFR Part 63 for that communication.

e. [63.14(a)]
Incorporations by reference. The materials listed in 40 CFR 63.14 are incorporated by reference in the corresponding sections noted.

f. [63.15]
Availability of information and confidentiality.

i. [63.15(a)(1) and (a)(2)]
Availability of information.

(a) With the exception of information protected through 40 CFR part 2, all reports, records, and other information collected by the Administrator under 40 CFR Part 63 are available to the public. In addition, a copy of each permit application, compliance plan (including the schedule of compliance), notification of compliance status, excess emissions and continuous monitoring systems performance report, and title V permit is available to the public, consistent with protections recognized in section 503(e) of the Clean Air Act as amended in 1990.

(b) The availability to the public of information provided to or otherwise obtained by the Administrator under this part shall be governed by 40 CFR part 2.

ii. [63.15(b)(1) and (b)(2)]
Confidentiality.

(a) If a permittee is required to submit information entitled to protection from disclosure under section 114(c) of the Clean Air Act as amended in 1990, the permittee may submit such information separately. The requirements of section 114(c) shall apply to such information.

(b) The contents of a Title V permit shall not be entitled to protection under section 114(c) of the Clean Air Act as amended in 1990; however, information submitted as part of an application for a Title V permit may be entitled to protection from disclosure.

2. 40 CFR Part 63, Subpart CC tables

| Table 2 to 40 CFR Part 63, Subpart CC<br>Leak Definitions for Pumps and Valves | | |
|---|---|---|
| Standard(40 CFR Part 63, Subpart H) | Phase | Leak definitions (ppm) |
| 40 CFR 63.163 (pumps) | I | 10,000 |
| | II | 5,000 |
| | III | 2,000 |
| 40 CFR 63.168 (valves) | I | 10,000 |
| | II | 1,000 |
| | III | 1,000 |

| Table 3 to 40 CFR Part 63, Subpart CC<br>Equipment Leak Record Keeping and Reporting<br>Requirements for Sources Complying With<br>40 CFR 63.648 of Subpart CC by Compliance With 40 CFR Part 63, Subpart H[a] | | |
|---|---|---|
| Reference (section of 40 CFR Part 63, Subpart H) | Description | Comment |
| 63.181(a) | Record keeping system requirements | Except for 40 CFR 63.181(b)(2)(iii) and 63.181(b)(9) |
| 63.181(b) | Records required for process unit equipment | Except for 40 CFR 63.181(b)(2)(iii) and 63.181(b)(9) |
| 63.181(c) | Visual Inspection Documentation | Except for 40 CFR 63.181(b)(2)(iii) and 63.181(b)(9) |
| 63.181(d) | Leak detection record requirements | Except for 40 CFR 63.181(d)(8) |
| 63.181(e) | Compliance requirements for pressure tests for batch product process equipment trains | This subsection does not apply to 40 CFR Part 63, Subpart CC |
| 63.181(f) | Compressor compliance test records | |

| | | |
|---|---|---|
| 63.181(g) | Closed-vent systems and control device records | |
| 63.181(h) | Process equipment quality improvement records | |
| 63.181(i) | Heavy liquid service determination record | |
| 63.181(j) | Equipment identification record | |
| 63.181(k) | Enclosed-vented process unit emission limitation record requirements | |
| 63.182(a) | Reports | |
| 63.182(b) | Initial notification report requirements | Not required |
| 63.182(c) | Notification of compliance status report | Except in 40 CFR 63.182(c); change "within 90 days of compliance dates"; Except in 40 CFR 63.182(c)(2) and (c)(4). |
| 63.182(d) | Periodic report | Except for 40 CFR 63.182(d)(2)(vii), (d)(2)(viii), and (d)(3) |

a This table does not include all the requirements delineated under the referenced sections. See referenced sections for specific requirements.

| Table 6 to 40 CFR Part 63, Subpart CC<br>40 CFR Part 63, Subpart A General Provisions Applicability to Subpart CC | | |
|---|---|---|
| Reference | Applies to Subpart CC | Comment |
| 63.1(a)(1) | Yes | |
| 63.1(a)(2) | Yes | |
| 63.1(a)(3) | Yes | |
| 63.1(a)(4) | No | Subpart CC (this table) specifies applicability of each paragraph in Subpart A to Subpart CC |

| | | |
|---|---|---|
| 63.1(a)(5)-(a)(9) | No | |
| 63.1(a)(10) | No | Subpart CC and other cross-referenced subparts specify calendar or operating day |
| 63.1(a)(11) | Yes | |
| 63.1(a)(12) | Yes | |
| 63.1(a)(13) | Yes | |
| 63.1(a)(14) | Yes | |
| 63.1(b)(1) | No | Subpart CC specifies its own applicability |
| 63.1(b)(2) | Yes | |
| 63.1(b)(3) | No | |
| 63.1(c)(1) | No | Subpart CC explicitly specifies requirements that apply |
| 63.1(c)(2) | No | Area sources are not subject to Subpart CC |
| 63.1(c)(3) | No | |
| 63.1(c)(4) | Yes | |
| 63.1(c)(5) | Yes | Except that sources are not required to submit notifications overridden by this table. |
| 63.1(d) | No | |
| 63.1(e) | No | |
| 63.2 | Yes | 40 CFR 63.641 of Subpart CC specifies that if the same term is defined in subparts A and CC, it shall have the meaning given in Subpart CC. |
| 63.3 | No | Units of measure are spelled out in Subpart CC |
| 63.4(a)(1)-63.4(a)(3) | Yes | |
| 63.4(a)(4) | No | Reserved |
| 63.4(a)(5) | Yes | |

| | | |
|---|---|---|
| 63.4(b) | Yes | |
| 63.4(c) | Yes | |
| 63.5(a)(1) | Yes | Except replace term "source" and "stationary source" in 40 CFR 63.4(a)(1) of Subpart A with "affected source". |
| 63.5(a)(2) | Yes | |
| 63.5(b)(1) | Yes | |
| 63.5(b)(2) | No | Reserved |
| 63.5(b)(3) | Yes | |
| 63.5(b)(4) | Yes | Except the cross-reference to 63.9(b) is changed to 63.9(b)(4) and (5). Subpart CC overrides 63.9(b)(2) and (b)(3). |
| 63.5(b)(5) | Yes | |
| 63.5(b)(6) | Yes | |
| 63.5(c) | No | Reserved |
| 63.5(d)(1)(i) | Yes | Except that the application shall be submitted as soon as practicable before startup but no later than 90 days (rather than 60 days) after the promulgation date of Subpart CC if the construction or reconstruction had commenced and initial startup had not occurred before the promulgation of Subpart CC. |
| 63.5(d)(1)(ii) | Yes | Except that for the affected sources subject to Subpart CC, emission estimates specified in 63.5(d)(1)(ii)(H) are not required. |
| 63.5(d)(1)(iii) | No | Subpart CC requires submittal of the notification of compliance status report in 40 CFR 63.654(e). |
| 63.5(d)(2) | No | |

| | | |
|---|---|---|
| 63.5(d)(3) | Yes | Except 63.5(d)(3)(ii) does not apply. |
| 63.5(d)(4) | Yes | |
| 63.5(e) | Yes | |
| 63.5(f)(1) | Yes | |
| 63.5(f)(2) | Yes | Except that the "60 days" in the cross-referenced 63.5(d)(1) is changed to "90 days" and the cross-referenced (b)(2) does not apply. |
| 63.6(a) | Yes | |
| 63.6(b)(1) | No | Subpart CC specifies compliance dates for sources subject to Subpart CC |
| 63.6(b)(2) | No | |
| 63.6(b)(3) | Yes | |
| 63.6(b)(4) | No | May apply when standards are proposed under section 112(f) of the Clean Air Act |
| 63.6(b)(5) | No | 63.654(d) of Subpart CC includes notification requirements |
| 63.6(b)(6) | No | |
| 63.6(b)(7) | No | |
| 63.6(c)(1) | No | 63.640 of Subpart CC specifies the compliance date |
| 63.6(c)(2)-(c)(4) | No | |
| 63.6(c)(5) | Yes | |
| 63.6(d) | No | |

| | | |
|---|---|---|
| 63.6(e) | Yes | Does not apply to Group 2 emission points. b(5) The startup, shutdown, and malfunction plan specified in 63.6(e)(3) is not required for wastewater operations that are not subject to 40 CFR Part 63, Subpart G. Except that actions taken during a startup, shutdown or malfunction that are not consistent with the startup, shutdown, and malfunction abatement plan do not need to be reported within 2 and 7 days of commencing and completing the action, respectively, but must be included in the next periodic report. |
| 63.6(f)(1) | Yes | |
| 63.6(f)(2)(i) | Yes | |
| 63.6(f)(2)(ii) | Yes | Subpart CC specifies the use of monitoring data in determining compliance with Subpart CC. |
| 63.6(f)(2)(iii)(A), (B), and (C) | Yes | |
| 63.6(f)(2)(iii)(D) | No | |
| 63.6(f)(2)(iv) | Yes | |
| 63.6(f)(2)(v) | Yes | |
| 63.6(f)(3) | Yes | |
| 63.6(g) | Yes | |
| 63.6(h) | No | Subpart CC does not require opacity and visible emission standards. |
| 63.6(h)(1) and (2) | Yes | |
| 63.6(h)(4) and (5) | No | Visible emission requirements and timing in Subpart CC |
| 63.6(h)(6) | Yes | |

| | | |
|---|---|---|
| 63.6(h)(7) through (h)(9) | No | Subpart CC does not require opacity standards. |
| 63.6(i) | Yes | Except for 63.6(i)(15), which is reserved |
| 63.6(j) | Yes | |
| 63.7(a)(1) | No | Subpart CC specifies required testing and compliance demonstration procedures. |
| 63.7(a)(2) | No | Test results must be submitted in the notification of compliance status report due 150 days after compliance date, as specified in 63.654(d) of Subpart CC. |
| 63.7(a)(3) | Yes | |
| 63.7(b) | No | |
| 63.7(c) | No | |
| 63.7(d) | Yes | |
| 63.7(e)(1) | Yes | |
| 63.7(e)(2) | Yes | |
| 63.7(e)(3) | No | Subpart CC specifies test methods and procedures |
| 63.7(e)(4) | Yes | |
| 63.7(f) | No | Subpart CC specifies applicable methods and provides alternatives. |
| 63.7(g) | No | Performance test and reporting specified in 63.654(d) |
| 63.7(h)(1) | Yes | |
| 63.7(h)(2) | Yes | |

| | | |
|---|---|---|
| 63.7(h)(3) | Yes | Yes, except site- specific test plans shall not be required, and where 63.7(g)(3) specifies submittal by the date the site-specific test plan is due, the date shall be 90 days prior to the notification of compliance status report in 63.654(d). |
| 63.7(h)(4) | No | |
| 63.7(h)(5) | Yes | |
| 63.8(a) | No | |
| 63.8(b)(1) | Yes | |
| 63.8(b)(2) | No | Subpart CC specifies locations to conduct monitoring. |
| 63.8(b)(3) | Yes | |
| 63.8(c)(1)(i) | Yes | |
| 63.8(c)(1)(ii) | No | Addressed by periodic reports in 63.654(e) of Subpart CC. |
| 63.8(c)(iii) | Yes | |
| 63.8(c)(2) | Yes | |
| 63.8(c)(3) | Yes | Except that verification of operational status shall, at a minimum, include completion of the manufacturer's written procedures that provide adequate assurance that the equipment would monitor accurately. |
| 63.8(c)(4) | No | Subpart CC specifies monitoring frequency in 63.641 and 63.654(g)(3) of Subpart CC. |
| 63.8(c)(5)-(c)(8) | No | |
| 63.8(d) | No | |
| 63.8(e) | No | |
| 63.8(f)(1) | Yes | |
| 63.8(f)(2) | Yes | |

| | | |
|---|---|---|
| 63.8(f)(3) | Yes | |
| 63.8(f)(4)(i) | No | Time frame for submitting request is specified in 63.654(f)(4) of Subpart CC. |
| 63.8(f)(4)(ii) | Yes | |
| 63.8(f)(4)(iii) | No | |
| 63.8(f)(5)(i) | Yes | |
| 63.8(f)(5)(ii) | No | |
| 63.8(f)(5)(iii) | Yes | |
| 63.8(f)(6) | No | Subpart CC does not require continuous emission monitors. |
| 63.8(g) | No | Subpart CC specifies data reduction procedures in 63.654(h)(3). |
| 63.9(a) | Yes | Except that the permittee does not need to send a copy of each notification submitted to the Regional Office of the EPA as stated in 63.9(a)(4)(ii). |
| 63.9(b)(1)(i) | No | Specified in 63.654(d)(2) of Subpart CC. |
| 63.9(b)(1)(ii) | No | |
| 63.9(b)(2) | No | An initial notification report is not required under Subpart CC. |
| 63.9(b)(3) | No | |
| 63.9(b)(4) | Yes | Except that the notification in 63.9(b)(4)(i) shall be submitted at the time specified in 63.654(d)(2) of Subpart CC. |
| 63.9(b)(5) | Yes | Except that the notification in 63.9(b)(5) shall be submitted at the time specified in 63.654(d)(2) of Subpart CC. |
| 63.9(c) | Yes | |
| 63.9(d) | Yes | |

| | | |
|---|---|---|
| 63.9(e) | No | |
| 63.9(f) | No | |
| 63.9(g) | No | |
| 63.9(h) | No | Subpart CC 63.652(d) specifies notification of compliance status report requirements. |
| 63.9(i) | Yes | |
| 63.9(j) | No | |
| 63.10(a) | Yes | |
| 63.10(b)(1) | No | 63.644(d) of Subpart CC specifies record retention requirements. |
| 63.10(b)(2)(i) | Yes | |
| 63.10(b)(2)(ii) | Yes | |
| 63.10(b)(2)(iii) | No | |
| 63.10(b)(2)(iv) | Yes | |
| 63.10(b)(2)(v) | Yes | |
| 63.10(b)(2)(vi)-(ix) | No | |
| 63.10(b)(2)(x) | Yes | |
| 63.10(b)(2)(xii)-(xiv) | No | |
| 63.10(b)(3) | No | |
| 63.10(c) | No | |
| 63.10(d)(1) | No | |
| 63.10(d)(2) | No | |
| 63.10(d)(3) | No | |
| 63.10(d)(4) | Yes | |
| 63.10(d)(5)(i) | Yes | Except that reports required by 63.10(d)(5)(i) may be submitted at the same time as periodic reports specified in 63.654(e) of Subpart CC. |

| | | |
|---|---|---|
| 63.10(d)(5)(ii) | Yes | Except that actions taken during a startup, shutdown, or malfunction that are not consistent with the startup, shutdown, and malfunction plan do not need to be reported within 2 and 7 days of commencing and completing the action, respectively, but must be included in the next periodic report. |
| 63.10(e) | No | |
| 63.10(f) | Yes | |
| 63.11-63.15 | Yes | |

a Wherever Subpart A specifies 'postmark' dates, submittals may be sent by methods other than the U.S. Mail (e.g., by fax or courier). Submittals shall be sent by the specified dates, but a postmark is not required.
b The plan, and any records or reports of startup, shutdown, and malfunction do not apply to Group 2 emission points.

| Table 8 to 40 CFR Part 63, Subpart CC<br>Valve Monitoring Frequency for Phase III | |
|---|---|
| Performance Level - Leaking Valves[a] (%) | Valve Monitoring Frequency |
| ▾4 | Monthly or QIP[b] |
| <4 | Quarterly |
| <3 | Semiannual |
| <2 | Annual |

a Percent leaking valves is calculated as a rolling average of two consecutive monitoring periods.
b QIP=Quality improvement program. Specified in 40 CFR 63.175.

| Table 9 to 40 CFR Part 63, Subpart CC<br>Valve Monitoring Frequency under 40 CFR 63.649 Alternative | |
|---|---|
| Performance Level - Leaking Valves[a] (%) | Valve Monitoring Frequency |

| | |
|---|---|
| ▼5 | Monthly or QIP[b] |
| <5 | Quarterly |
| <4 | Semiannual |
| <3 | Annual |

a Percent leaking valves is calculated as a rolling average of two consecutive monitoring periods.
b QIP=Quality improvement program. Specified in 40 CFR 63.175.

3. 40 CFR Part 63, Subpart H tables

| Table 1 to 40 CFR Part 63, Subpart H -- Batch Processes Monitoring Frequency for Equipment Other than Connectors | | | |
|---|---|---|---|
| Operating Time (% of year) | Equivalent continuous process monitoring frequency time in use | | |
| | Monthly | Quarterly | Semiannually |
| 0 to < 25 | Quarterly | Semiannually | Annually |
| 25 to < 50 | Quarterly | Semiannually | Annually |
| 50 to < 75 | Bimonthly | Three Times | Semiannually |
| 75 to 100 | Monthly | Quarterly | Semiannually |

| Table 2 to 40 CFR Part 63, Subpart H -- Surge Control Vessels and Bottoms Receivers at Existing Sources | |
|---|---|
| Vessel capacity | Vapor Pressure[1] (kilopascals) |
| 75 $m^3$ ▼ 151 $m^3$ | ▼ 13.1 |
| 151 $m^3$ ▼ capacity | ▼ 5.2 |

1 Maximum true vapor pressure of total organic HAP at operating temperature as defined in Subpart G of 40 CFR Part 63.

| Table 3 to 40 CFR Part 63, Subpart H -- Surge Control Vessels and Bottoms Receivers at New Sources | |
|---|---|
| Vessel capacity | Vapor pressure[1] |
| 38 $m^3$ ▼ 151 $m^3$ | ▼13.1 kilopascals |
| 151 $m^3$ ▼ capacity | ▼0.7 kilopascals |

1 Maximum true vapor pressure of total organic HAP at operating temperature as defined in Subpart G of 40 CFR Part 63.

| Table 4 to 40 CFR Part 63, Subpart H -- Applicable 40 CFR Part 63 General Provisions |
|---|
| 40 CFR 63.1(a)(1), (a)(2), (a)(3), (a)(13), (a)(14), (b)(2) and (c)(4)<br>40 CFR 63.2<br>40 CFR 63.5(a)(1), (a)(2), (b), (d)(1)(ii), (d)(4), (e), (f)(1) and (f)(2)<br>40 CFR 63.6(a), (b)(3), (c)(5), (i)(1), (i)(2), (i)(4)(i)(A), (i)(5) through (i)(14), (i)(16) and (j)<br>40 CFR 63.9(a)(2), (b)(4)(i)[a], (b)(4)(ii), (b)(4)(iii), (b)(5)[a], (c) and (d)<br>40 CFR 63.10(d)(4)<br>40 CFR 63.12(b)<br><br>a The notifications specified in 40 CFR 63.9(b)(4)(i) and (b)(5) shall be submitted at the times specified in 40 CFR Part 65. |

## B. State Only Enforceable Section

I. The following insignificant emissions units are located at this facility:

B013 - Reformer 1 Regenerator Furnace;
B024 - Asphalt Heater;
B025 - External Asphalt Heater;
F002 - Coke Piles;
P030 - Foul Condensate Stripper #2 (PTI 04-708);
P034 - Stormwater Diversion Chamber (PTI 04-811);
P901 - Catalyst Loading;
T048 - IFR, PR-500392 (PTI 04-875);
T054 - PST, PR-1634, Propane;
T094 - FR, PR-500248;
T095 - FR, PR-500265;
T112 - FR, PR-500880;
T118 - PST, PR-1570, Propylene;
T119 - PST, PR-1575, Propane;
T121 - FR, PR-500160 (PTI 04-170);
T123 - Propane Cavern;
T124 - PST, PR-1571, Propylene;
T125 - PST, PR-1572, Propylene;
T126 - PST, PR-1577, Propylene;
T127 - PST, PR-1631, Propylene;
T128 - PST, PR-1576, Propane;
T129 - PST, PR-1578, Propane;
T130 - PST, PR-1632, Propane;
T131 - PST, PR-1633, Propane;
T132 - PST, PR-1635, Propane;
T133 - PST, PR-1636, Propane;
T133 - PST, PR-1637, Propane;
T135 - FR, PR-500734;
T140 - Bio Sludge Storage (PTI 04-379);
T145 - FR, PR-500022 (PTI 04-708);
T148 - FR, PR-500019 (PTI 04-708);
T149 - FR, PR-500021 (PTI 04-708);
T151 - FR, PR-500020 (PTI 04-708);
T153 - FR, PR-500175 (PTI 04-708);
T154 - FR, PR-500174 (PTI 04-708);
T155 - FR, PR-500172 (PTI 04-708);
T156 - FR, PR-500171 (PTI 04-708);
T157 - FR, PR-500002 (PTI 04-708);
T159 - FR, PR-500001 (PTI 04-708);
T161 - FR, PR-500003 (PTI 04-708);
T163 - FR, PR-500648 (PTI 04-708);
T165 - FR, PR-511261 (PTI 04-759);
T168 - EFR, PR 500026 (PTI 04-791);

T169 - EFR, PR-500027 (PTI 04-791);
T172 - IFR, PR-500393 (PTI 04-896);
T173 - FR, PR-500407 (PTI 04-924);
Z003 - C4 Vapor Recovery;
Z004 - Propane Truck Loading Rack;
Z005 - #1 Foul Condensate Stripper;
Z010 - Vac Bottom Loading;
Z020 - Drum Cleaning;
Z023 - Dupont Dye Tank 161;
Z025 - Activated Sludge Tank 702;
Z040 - Track 10 Loading;
Z044 - Parts Cleaning;
Z047 - Gasoline Dispensing Facility;
Z048 - Caustic Tanks;
Z049 - Bleach and Dye Mix Tanks;
Z050 - Spent Caustic Tanks;
Z051 - Inorganic Compound Tanks;
Z052 - Misc. Tanks;
Z053 - Misc. Fired Tank Heaters; and
Z902 - 0Asphalt Loading Rack.

Each insignificant unit at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within a permit to install for the emissions unit.

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| B001 - $H_2$ Plant Furnace, 221 mmBtu per hr (PR-2980) | OAC rule 3745-31-02(A)(2) (PTI 04-01290 as issued on July 25, 2002) | See sections A.I.2.a, A.I.2.b, and A.I. 2.c. |
| | OAC rule 3745-31-05(D) (PTI 04-1046 as modified on August 5, 1998) | 33.15 pounds per hour nitrogen oxides ($NO_x$) and 96.80 tons per year $NO_x$ based on a rolling, 12-month summation of the monthly emissions<br><br>See sections A.I.2.e and A.II.3. |
| | OAC rule 3745-17-07(A) | Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule. |
| | OAC rule 3745-17-10(B) | 0.020 pound of particulate emissions per million Btu of actual heat input |
| | OAC rule 3745-18-54(W)(1) | See section A.I.2.d. |

**2. Additional Terms and Conditions**

**2.a** This permit to install incorporates the emission limits and schedules set out in paragraphs 14-18 and 21 of the Consent Decree (United States of America, et al., v. BP Exploration & Oil Co., et al., Civil Action No. 2:96CV095 RL).

**2.b** The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot, except during periods of startup, shutdown or malfunction of the refinery fuel gas amine systems provided that BP shall to the extent practicable, maintain and operate any affected facility including

associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

**2.c** By no later than September 30, 2003, this emissions unit shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices.

**2.d** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2).

**2.e** The emission limitation of 27.84 tons per year $SO_2$ based on a rolling, 12-month summation of the monthly emissions established pursuant to PTI 04-1046 is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2).

## II. Operational Restrictions

1. The permittee shall only burn natural gas, LP gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas, LP gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 0.10 grain per dry standard cubic foot as a volume-weighted, rolling, 3-hour average.

3. The permittee shall continue to implement the Preventive Maintenance and Malfunction Abatement Plan (PMMAP) for this emissions unit from the time of startup so as to minimize excess emissions. The plan may be revised and resubmitted in the future subject to Ohio EPA review and comment. The PMMAP shall include the following:

   a. a description of the items or conditions that will be inspected, the frequency of these inspections or repairs, and an identification of the types and quantities of replacement parts which will be maintained in inventory for quick replacement;

   b. an identification of the emissions unit and the operating outlet variables of the air pollution control equipment that will be monitored in order to detect a malfunction or failure, the normal operating range of these variables, and a description of the monitoring or surveillance procedures and of the method of informing operating personnel of any malfunction, including alarm systems, lights and/or other indicators; and,

   c. a description of the corrective procedures that will be taken in the event of a malfunction or failure in order to achieve compliance with any applicable law or permit limit as expeditiously as practicable.

## III. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas, LP gas or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall monitor and record the hourly, daily and monthly average firing rate in terms of standard cubic feet per hour. From these data, the permittee shall calculate and maintain records of the monthly and rolling, 12-month total $NO_x$ emission rates in units of tons per month and tons per year in accordance with the procedure outlined in section V.

3. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the $H_2S$ content in the fuel gas before being burned in this fuel gas combustion device.

   a. The $H_2S$ monitoring device shall continuously monitor and record the concentration (dry basis) of $H_2S$ in fuel gases before being burned in any fuel gas combustion device.

   b. The span value for this instrument is 425 mg/dscm $H_2S$.

   c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of $H_2S$ in the fuel gas being burned.

   d. The performance evaluations for this $H_2S$ monitor shall use Performance Specification 7. Method 11, 15, 15A, 16 shall be used for conducting the relative accuracy evaluations.

4. The permittee shall automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span shall, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system shall allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

5. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

6. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD

check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

7. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

8. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

9. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

10. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

11. The permittee shall maintain records to verify that the Preventive Maintenance and Malfunction Abatement Plan is being implemented and the content of the of the PMMAP has been met.

## IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each day when the $NO_x$ emissions exceed 33.15 lbs/hr and/or 96.80 tons/yr based on a rolling, 12-month summation of the monthly emissions.

2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, LP gas, and/or natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

3. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

4. The permittee shall submit an $H_2S$ excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot of fuel gas burned. Written reports of excess emissions shall include the following information:

   a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

   b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

   c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

   d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

5. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

c. The permittee shall submit a quarterly report for each CEMS the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

i. Permittee name and address.

ii. Identification and location of monitors in the CEMS.

iii. Manufacturer and model number of each monitor in the CEMS.

iv. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

v. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

vi. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

## V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

      20% opacity as a 6-minute average

      Applicable Compliance Method:

      If required, compliance shall be demonstrated based upon the procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

   b. Emission Limitation:

      0.020 pound of particulate emissions per million Btu of actual heat input

      Applicable Compliance Method:

      If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

   c. Emission Limitation:

      0.10 grain $H_2S$ per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

   d. Emission Limitation:

      33.15 pounds per hour $NO_x$

      Applicable Compliance Method:

      Multiply the actual firing rate in mmBtu/hr by the $NO_x$ emission factor determined during the most recent stack test. A stack test was conducted on this emissions unit on June 17, 1999 which

resulted in an emission factor of 0.079 lb $NO_x$ per mmBtu. If required, the permittee shall establish a new $NO_x$ emission factor in units of pounds $NO_x$ per million Btu of heat input using Methods 3A, 7E and 19 of 40 CFR Part 60. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

e. Emission Limitation:

96.80 tons per year $NO_x$ based on a rolling, 12-month summation of the monthly emissions

Applicable Compliance Method:

Multiply the stack test derived emission factor by the monthly average hourly fuel gas burned to determine the monthly total $NO_x$ emissions. Add the monthly total $NO_x$ emissions to the total $NO_x$ emissions for the previous 11 months to determine the rolling, 12-month total $NO_x$ emissions.

2. Emission testing requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for $NO_x$.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Toledo Division of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Toledo Division of Environmental Services's refusal to accept the results of the emission test(s).

Personnel from the Toledo Division of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Toledo Division of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Toledo Division of Environmental Services.

## VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

2. The terms and conditions of this PTI shall supersede the terms and conditions for this emissions unit established by PTI application number 04-1046 modified on August 5, 1998.

3. Nothing in this permit related to the PMMAP shall be construed to relieve the permittee from its obligation to comply with the requirements of OAC rule 3745-15-06(A) and (B), and OAC rule 3750-25-25 (related to toxic release reporting). Nothing in the permit related to the PMMAP shall modify or limit the Director's authority under OAC rule 3745-15-06(D) to require a preventive maintenance and malfunction abatement plan which is acceptable to the Director if, as the rule states, in the judgement of the Director, such a plan is needed for any emissions units at this facility.

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **B003**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| B003 - ADHT Stripper Reboiler, 52 mmBtu per hr (PR-2974) | OAC rule 3745-31-02(A)(2) (PTI 04-01290 as issued on July 25, 2002) | See sections A.I.2.a, A.I.2.b, and A.I.2.c. |
| | OAC rule 3745-17-07(A) | Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule. |
| | OAC rule 3745-17-10(B) | 0.020 pound of particulate emissions per million Btu of actual heat input |
| | OAC rule 3745-18-54(W)(1) | See section A.I.2.d. |

**2.** **Additional Terms and Conditions**

**2.a** This permit to install incorporates the emission limits and schedules set out in paragraphs 14-18 and 21 of the Consent Decree (United States of America, et al., v. BP Exploration & Oil Co., et al., Civil Action No. 2:96CV095 RL).

**2.b** The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot, except during periods of startup, shutdown or malfunction of the refinery fuel gas amine systems provided that BP shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

**2.c** By no later than September 30, 2003, this emissions unit shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices.

**2.d** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2).

## II. Operational Restrictions

1. The permittee shall only burn natural gas, LP gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas, LP gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 0.10 grain per dry standard cubic foot as a volume-weighted, rolling, 3-hour average.

## III. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas, LP gas, or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the $H_2S$ content in the fuel gas before being burned in this fuel gas combustion device.

   a. The $H_2S$ monitoring device shall continuously monitor and record the concentration (dry basis) of $H_2S$ in fuel gases before being burned in any fuel gas combustion device.

   b. The span value for this instrument is 425 mg/dscm $H_2S$.

   c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of $H_2S$ in the fuel gas being burned.

   d. The performance evaluations for this $H_2S$ monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration

measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

8. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

9. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these

systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, LP gas, and/or natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.

3. The permittee shall submit an $H_2S$ excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot of fuel gas burned. Written reports of excess emissions shall include the following information:

   a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

   b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

   c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

   d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

4. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

5. The permittee shall submit a quarterly report for each CEMS, the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

## V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

      20% opacity as a 6-minute average

      Applicable Compliance Method:

      If required, compliance shall be demonstrated based upon the procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

   b. Emission Limitation:

      0.020 pound of particulate emissions per million Btu of actual heat input

      Applicable Compliance Method:

      If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

   c. Emission Limitation:

      0.10 grain $H_2S$ per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

## VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **B004**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

**Applicable Emissions Limitations and/or Control Requirements**

**I.**

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| B004 - Riley Boiler, 332 mmBtu per hr **(**PR-2975) | OAC rule 3745-31-02(A)(2) (PTI 04-01290 as issued on July 25, 2002) | See sections A.I.2.a, A.I.2.b, and A.I.2.c. |
| | OAC rule 3745-17-07(A) | Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule. |
| | OAC rule 3745-17-10(B) | 0.020 pound of particulate emissions per million Btu of actual heat input |
| | OAC rule 3745-18-54(W)(1) | See section A.I.2.d. |

**2. Additional Terms and Conditions**

**2.a** This permit to install incorporates the emission limits and schedules set out in paragraphs 14-18 and 21 of the Consent Decree (United States of America, et al., v. BP Exploration & Oil Co., et al., Civil Action No. 2:96CV095 RL).

**2.b** The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot, except during periods of startup, shutdown or malfunction of the refinery fuel gas amine systems provided that BP shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

**2.c** By no later than September 30, 2003, this emissions unit shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices.

**2.d** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2).

## II. Operational Restrictions

1. The permittee shall only burn natural gas, LP gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas, LP gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 0.10 grain per dry standard cubic foot as a volume-weighted, rolling, 3-hour average.

## III. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas, LP gas, or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the $H_2S$ content in the fuel gas before being burned in this fuel gas combustion device.

   a. The $H_2S$ monitoring device shall continuously monitor and record the concentration (dry basis) of $H_2S$ in fuel gases before being burned in any fuel gas combustion device.

   b. The span value for this instrument is 425 mg/dscm $H_2S$.

   c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of $H_2S$ in the fuel gas being burned.

   d. The performance evaluations for this $H_2S$ monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration

measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

8. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

9. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these

systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, LP gas, and/or natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.

   The permittee shall submit an $H_2S$ excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot of fuel gas burned. Written reports of excess emissions shall include the following information:

   a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

   b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

   c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

   d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

4. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

5. The permittee shall submit a quarterly report for each CEMS, the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

## V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

      20% opacity as a 6-minute average

      Applicable Compliance Method:

      If required, compliance shall be demonstrated based upon the procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

   b. Emission Limitation:

      0.020 pound of particulate emissions per million Btu of actual heat input

      Applicable Compliance Method:

      If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

   c. Emission Limitation:

      0.10 grain $H_2S$ per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

## VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| B005 - Reformer 2 Regenerator Heater, 30 mmBtu per hr (PR-2985) | OAC rule 3745-31-02(A)(2) (PTI 04-01290 as issued on July 25, 2002) | See sections A.I.2.a, A.I.2.b, and A.I.2.c. |
| | OAC rule 3745-17-07(A) | Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule. |
| | OAC rule 3745-17-10(B) | 0.020 pound of particulate emissions per million Btu of actual heat input |
| | OAC rule 3745-18-54(W)(1) | See section A.I.2.d. |

**2. Additional Terms and Conditions**

**2.a** This permit to install incorporates the emission limits and schedules set out in paragraphs 14-18 and 21 of the Consent Decree (United States of America, et al., v. BP Exploration & Oil Co., et al., Civil Action No. 2:96CV095 RL).

**2.b** The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot, except during periods of startup, shutdown or malfunction of the refinery fuel gas amine systems provided that BP shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

**2.c** By no later than September 30, 2003, this emissions unit shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices.

**2.d** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2).

## II. Operational Restrictions

1. The permittee shall only burn natural gas, LP gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas, LP gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 0.10 grain per dry standard cubic foot as a volume-weighted, rolling, 3-hour average.

## III. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas, LP gas, or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the $H_2S$ content in the fuel gas before being burned in this fuel gas combustion device.

   a. The $H_2S$ monitoring device shall continuously monitor and record the concentration (dry basis) of $H_2S$ in fuel gases before being burned in any fuel gas combustion device.

   b. The span value for this instrument is 425 mg/dscm $H_2S$.

   c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of $H_2S$ in the fuel gas being burned.

   d. The performance evaluations for this $H_2S$ monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration

measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

8. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

9. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these

systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, LP gas, and/or natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.

   The permittee shall submit an $H_2S$ excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot of fuel gas burned. Written reports of excess emissions shall include the following information:

   a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

   b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

   c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

   d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

4. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

5. The permittee shall submit a quarterly report for each CEMS, containing the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

## V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

      20% opacity as a 6-minute average

      Applicable Compliance Method:

      If required, compliance shall be demonstrated based upon the procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

   b. Emission Limitation:

      0.020 pound of particulate emissions per million Btu of actual heat input

      Applicable Compliance Method:

      If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

   c. Emission Limitation:

      0.10 grain $H_2S$ per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

## VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| B005 - Reformer 2 Regenerator Heater, 30 mmBtu per hr (PR-2985) | OAC rule 3745-31-02(A)(2) (PTI 04-01290 as issued on July 25, 2002) | See sections A.I.2.a, A.I.2.b, and A.I.2.c. |
| | OAC rule 3745-17-07(A) | Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule. |
| | OAC rule 3745-17-10(B) | 0.020 pound of particulate emissions per million Btu of actual heat input |
| | OAC rule 3745-18-54(W)(1) | See section A.I.2.d. |

**2.** **Additional Terms and Conditions**

**2.a** This permit to install incorporates the emission limits and schedules set out in paragraphs 14-18 and 21 of the Consent Decree (United States of America, et al., v. BP Exploration & Oil Co., et al., Civil Action No. 2:96CV095 RL).

**2.b** The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot, except during periods of startup, shutdown or malfunction of the refinery fuel gas amine systems provided that BP shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

**2.c** By no later than September 30, 2003, this emissions unit shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices.

**2.d** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2).

## II. Operational Restrictions

1. The permittee shall only burn natural gas, LP gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas, LP gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 0.10 grain per dry standard cubic foot as a volume-weighted, rolling, 3-hour average.

## III. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas, LP gas, or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the $H_2S$ content in the fuel gas before being burned in this fuel gas combustion device.

   a. The $H_2S$ monitoring device shall continuously monitor and record the concentration (dry basis) of $H_2S$ in fuel gases before being burned in any fuel gas combustion device.

   b. The span value for this instrument is 425 mg/dscm $H_2S$.

   c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of $H_2S$ in the fuel gas being burned.

   d. The performance evaluations for this $H_2S$ monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration

measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

8. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

9. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these

systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, LP gas, and/or natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.

   The permittee shall submit an $H_2S$ excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot of fuel gas burned. Written reports of excess emissions shall include the following information:

   a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

   b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

   c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

   d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

4. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

5. The permittee shall submit a quarterly report for each CEMS, containing the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

## V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

      20% opacity as a 6-minute average

      Applicable Compliance Method:

      If required, compliance shall be demonstrated based upon the procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

   b. Emission Limitation:

      0.020 pound of particulate emissions per million Btu of actual heat input

      Applicable Compliance Method:

      If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

   c. Emission Limitation:

      0.10 grain $H_2S$ per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

## VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| B006 - Reformer 2 Furnace, 285 mmBtu per hr **(**PR-2987) | OAC rule 3745-31-02(A)(2) (PTI 04-01290 as issued on July 25, 2002) | See sections A.I.2.a, A.I.2.b, and A.I.2.c. |
| | OAC rule 3745-31-05(D) (PTI 04-1046 as modified on August 5, 1998) | 42.0 pounds per hour nitrogen oxides ($NO_x$) and 122.64 tons per year $NO_x$ based on a rolling, 12-month summation of the monthly emissions<br><br>See section A.II.3. |
| | OAC rule 3745-17-07(A) | Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule. |
| | OAC rule 3745-17-10(B) | 0.020 pound of particulate emissions per million Btu of actual heat input |
| | OAC rule 3745-18-54(W)(1) | See section A.I.2.d. |

**2.** **Additional Terms and Conditions**

**2.a** This permit to install incorporates the emission limits and schedules set out in paragraphs 14-18 and 21 of the Consent Decree (United States of America, et al., v. BP Exploration & Oil Co., et al., Civil Action No. 2:96CV095 RL).

**2.b** The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot, except during periods of startup, shutdown or malfunction of the refinery fuel gas amine systems provided that BP shall to the extent practicable, maintain and operate any affected facility including

associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

**2.c** By no later than September 30, 2003, this emissions unit shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices.

**2.d** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2).

## II. Operational Restrictions

1. The permittee shall only burn natural gas, LP gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas, LP gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 0.10 grain per dry standard cubic foot as a volume-weighted, rolling, 3-hour average.

3. The permittee shall continue to implement the Preventive Maintenance and Malfunction Abatement Plan (PMMAP) for this emissions unit from the time of startup so as to minimize excess emissions. The plan may be revised and resubmitted in the future subject to Ohio EPA review and comment. The PMMAP shall include the following:

   a. a description of the items or conditions that will be inspected, the frequency of these inspections or repairs, and an identification of the types and quantities of replacement parts which will be maintained in inventory for quick replacement;

   b. an identification of the emissions unit and the operating outlet variables of the air pollution control equipment that will be monitored in order to detect a malfunction or failure, the normal operating range of these variables, and a description of the monitoring or surveillance procedures and of the method of informing operating personnel of any malfunction, including alarm systems, lights and/or other indicators; and,

   c. a description of the corrective procedures that will be taken in the event of a malfunction or failure in order to achieve compliance with any applicable law or permit limit as expeditiously as practicable.

## III. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas, LP gas, or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall monitor and record the hourly, daily and monthly average firing rate in terms of standard cubic feet per hour. From these data, the permittee shall calculate and maintain records of the monthly and rolling, 12-month total $NO_x$ emission rates in units of tons per month and tons per year in accordance with the procedure outlined in section V.

3. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the $H_2S$ content in the fuel gas before being burned in this fuel gas combustion device.

   a. The $H_2S$ monitoring device shall continuously monitor and record the concentration (dry basis) of $H_2S$ in fuel gases before being burned in any fuel gas combustion device.

   b. The span value for this instrument is 425 mg/dscm $H_2S$.

   c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of $H_2S$ in the fuel gas being burned.

   d. The performance evaluations for this $H_2S$ monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

4. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

5. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

6. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

7. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as

follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

8. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

9. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

10. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

11. The permittee shall maintain records to verify that the Preventive Maintenance and Malfunction Abatement Plan is being implemented and the content of the of the PMMAP has been met.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, LP gas, and/or natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. The permittee shall submit quarterly deviation (excursion) reports that identify each day when the $NO_{x.}$ emissions exceed 42.0 lbs/hr and/or 122.64 tons/yr based on a rolling, 12-month summation of the monthly emissions.

3. The deviation reports under shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

4. The permittee shall submit an $H_2S$ excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot of fuel gas burned. Written reports of excess emissions shall include the following information:

   a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

   b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

   c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

   d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

5. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

   a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

6. The permittee shall submit a quarterly report for each CEMS the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

## V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

b. Emission Limitation:

0.020 pound of particulate emissions per million Btu of actual heat input

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

c. Emission Limitation:

0.10 grain $H_2S$ per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

d. Emission Limitation:

42.0 pounds per hour $NO_x$

Applicable Compliance Method:

Multiply the actual firing rate in mmBtu/hr by the $NO_x$ emission factor determined during the most recent stack test. A stack test was conducted on this emissions unit on August 18, 1999 which resulted in an emission factor of 0.076 lb $NO_x$ per mmBtu. If required, the permittee shall establish a new $NO_x$ emission factor in units of pounds $NO_x$ per million Btu of heat input using Methods 3A, 7E and 19 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

e. Emission Limitation:

122.64 tons per year $NO_x$ based on a rolling, 12-month summation of the monthly emissions

Applicable Compliance Method:

Multiply the stack test derived emission factor by the monthly average hourly fuel gas burned to determine the monthly total $NO_x$ emissions. Add the monthly

total $NO_x$ emissions to the total $NO_x$ emissions for the previous 11 months to determine the rolling, 12-month total $NO_x$ emissions.

2. Emission testing requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for nitrogen oxides.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Toledo Division of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Toledo Division of Environmental Services's refusal to accept the results of the emission test(s).

Personnel from the Toledo Division of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Toledo Division of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Toledo Division of Environmental Services.

## VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take

necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

2. The terms and conditions of this PTI shall supersede the terms and conditions for this emissions unit established by PTI application number 04-1046 modified on August 5, 1998.

3. Nothing in this permit related to the PMMAP shall be construed to relieve the permittee from its obligation to comply with the requirements of OAC rule 3745-15-06(A) and (B), and OAC rule 3750-25-25 (related to toxic release reporting). Nothing in the permit related to the PMMAP shall modify or limit the Director's authority under OAC rule 3745-15-06(D) to require a preventive maintenance and malfunction abatement plan which is acceptable to the Director if, as the rule states, in the judgement of the Director, such a plan is needed for any emissions units at this facility.

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| B008 - Iso 2 Feed Heaters, 97.4 MMBtu per hr (PR-2994) | OAC rule 3745-31-02(A)(2) (PTI 04-01290 as issued on July 25, 2002) | See sections A.I.2.a, A.I.2.b, and A.I.2.c. |
| | OAC rule 3745-17-07(A) | Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule. |
| | OAC rule 3745-17-10(B) | 0.020 pound of particulate emissions per million Btu of actual heat input |
| | OAC rule 3745-18-54(W)(1) | See section A.I.2.d. |

**2. Additional Terms and Conditions**

**2.a** This permit to install incorporates the emission limits and schedules set out in paragraphs 14-18 and 21 of the Consent Decree (United States of America, et al., v. BP Exploration & Oil Co., et al., Civil Action No. 2:96CV095 RL).

**2.b** The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot, except during periods of startup, shutdown or malfunction of the refinery fuel gas amine systems provided that BP shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

**2.c** By no later than September 30, 2003, this emissions unit shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices.

**2.d** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2).

## II. Operational Restrictions

1. The permittee shall only burn natural gas, LP gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas, LP gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 0.10 grain per dry standard cubic foot as a volume-weighted, rolling, 3-hour average.

## III. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas, LP gas, or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the $H_2S$ content in the fuel gas before being burned in this fuel gas combustion device.

   a. The $H_2S$ monitoring device shall continuously monitor and record the concentration (dry basis) of $H_2S$ in fuel gases before being burned in any fuel gas combustion device.

   b. The span value for this instrument is 425 mg/dscm $H_2S$.

   c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of $H_2S$ in the fuel gas being burned.

   d. The performance evaluations for this $H_2S$ monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration

measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

8. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

9. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these

systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, LP gas, and/or natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.

   The permittee shall submit an $H_2S$ excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot of fuel gas burned. Written reports of excess emissions shall include the following information:

   a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

   b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

   c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

   d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

4. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

5. The permittee shall submit a quarterly report for each CEMS, containing the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

## V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

      20% opacity as a 6-minute average

      Applicable Compliance Method:

      If required, compliance shall be demonstrated based upon the procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

   b. Emission Limitation:

      0.020 pound of particulate emissions per million Btu of actual heat input

      Applicable Compliance Method:

      If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

   c. Emission Limitation:

      0.10 grain $H_2S$ per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

## VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **B009**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| B009 - Iso 2 Stabilizer Reboiler, 110 mmBtu per hr (PR-2992) | OAC rule 3745-31-02(A)(2) (PTI 04-01290 as issued on July 25, 2002) | See sections A.I.2.a, A.I.2.b, and A.I.2.c. |
| | OAC rule 3745-17-07(A) | Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule. |
| | OAC rule 3745-17-10(B) | 0.020 pound of particulate emissions per million Btu of actual heat input |
| | OAC rule 3745-18-54(W)(5) | See section A.I.2.d. |

**2. Additional Terms and Conditions**

**2.a** This permit to install incorporates the emission limits and schedules set out in paragraphs 14-18 and 21 of the Consent Decree (United States of America, et al., v. BP Exploration & Oil Co., et al., Civil Action No. 2:96CV095 RL).

**2.b** The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot, except during periods of startup, shutdown or malfunction of the refinery fuel gas amine systems provided that BP shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

**2.c** By no later than September 30, 2003, this emissions unit shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices.

**2.d** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2).

## II. Operational Restrictions

1. The permittee shall only burn natural gas, LP gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas, LP gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 0.10 grain per dry standard cubic foot as a volume-weighted, rolling, 3-hour average.

## III. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas, LP gas, or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the $H_2S$ content in the fuel gas before being burned in this fuel gas combustion device.

   a. The $H_2S$ monitoring device shall continuously monitor and record the concentration (dry basis) of $H_2S$ in fuel gases before being burned in any fuel gas combustion device.

   b. The span value for this instrument is 425 mg/dscm $H_2S$.

   c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of $H_2S$ in the fuel gas being burned.

   d. The performance evaluations for this $H_2S$ monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration

measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

8. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

9. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these

systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, LP gas, and/or natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.

   The permittee shall submit an $H_2S$ excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot of fuel gas burned. Written reports of excess emissions shall include the following information:

   a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

   b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

   c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

   d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

4. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

5. The permittee shall submit a quarterly report for each CEMS, containing the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

## V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

      20% opacity as a 6-minute average

      Applicable Compliance Method:

      If required, compliance shall be demonstrated based upon the procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

   b. Emission Limitation:

      0.020 pound of particulate emissions per million Btu of actual heat input

      Applicable Compliance Method:

      If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

   c. Emission Limitation:

      0.10 grain $H_2S$ per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

## VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| B010 - Iso 2 Splitter Reboiler, 110 mmBtu per hr (PR-2993) | OAC rule 3745-31-02(A)(2) (PTI 04-01290 as issued on July 25, 2002) | See sections A.I.2.a, A.I.2.b, and A.I.2.c. |
| | OAC rule 3745-17-07(A) | Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule. |
| | OAC rule 3745-17-10(B) | 0.020 pound of particulate emissions per million Btu of actual heat input |
| | OAC rule 3745-18-54(W)(5) | See section A.I.2.d. |

**2. Additional Terms and Conditions**

**2.a** This permit to install incorporates the emission limits and schedules set out in paragraphs 14-18 and 21 of the Consent Decree (United States of America, et al., v. BP Exploration & Oil Co., et al., Civil Action No. 2:96CV095 RL).

**2.b** The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot, except during periods of startup, shutdown or malfunction of the refinery fuel gas amine systems provided that BP shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

**2.c** By no later than September 30, 2003, this emissions unit shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices.

**2.d** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2).

## II. Operational Restrictions

1. The permittee shall only burn natural gas, LP gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas, LP gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 0.10 grain per dry standard cubic foot as a volume-weighted, rolling, 3-hour average.

## III. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas, LP gas, or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the $H_2S$ content in the fuel gas before being burned in this fuel gas combustion device.

   a. The $H_2S$ monitoring device shall continuously monitor and record the concentration (dry basis) of $H_2S$ in fuel gases before being burned in any fuel gas combustion device.

   b. The span value for this instrument is 425 mg/dscm $H_2S$.

   c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of $H_2S$ in the fuel gas being burned.

   d. The performance evaluations for this $H_2S$ monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration

measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

8. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

9. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these

systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, LP gas, and/or natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.

   The permittee shall submit an $H_2S$ excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot of fuel gas burned. Written reports of excess emissions shall include the following information:

   a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

   b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

   c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

   d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

4. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

5. The permittee shall submit a quarterly report for each CEMS, containing the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

## V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

      20% opacity as a 6-minute average

      Applicable Compliance Method:

      If required, compliance shall be demonstrated based upon the procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

   b. Emission Limitation:

      0.020 pound of particulate emissions per million Btu of actual heat input

      Applicable Compliance Method:

      If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

   c. Emission Limitation:

      0.10 grain $H_2S$ per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

## VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| B014 - Reformer 1 Furnace, 248 mmBtu per hr (PR-2962) | OAC rule 3745-31-02(A)(2) (PTI 04-01290 as issued on July 25, 2002) | See sections A.I.2.a, A.I.2.b, and A.I.2.c. |
| | OAC rule 3745-17-07(A) | Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule. |
| | OAC rule 3745-17-10(B) | 0.020 pound of particulate emissions per million Btu of actual heat input |
| | OAC rule 3745-18-54(W)(1) | See section A.I.2.d. |

**2. Additional Terms and Conditions**

**2.a** This permit to install incorporates the emission limits and schedules set out in paragraphs 14-18 and 21 of the Consent Decree (United States of America, et al., v. BP Exploration & Oil Co., et al., Civil Action No. 2:96CV095 RL).

**2.b** The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot, except during periods of startup, shutdown or malfunction of the refinery fuel gas amine systems provided that BP shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

**2.c** By no later than September 30, 2003, this emissions unit shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices.

**2.d** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2).

## II. Operational Restrictions

1. The permittee shall only burn natural gas, LP gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas, LP gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 0.10 grain per dry standard cubic foot as a volume-weighted, rolling, 3-hour average.

## III. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas, LP gas, or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the $H_2S$ content in the fuel gas before being burned in this fuel gas combustion device.

   a. The $H_2S$ monitoring device shall continuously monitor and record the concentration (dry basis) of $H_2S$ in fuel gases before being burned in any fuel gas combustion device.

   b. The span value for this instrument is 425 mg/dscm $H_2S$.

   c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of $H_2S$ in the fuel gas being burned.

   d. The performance evaluations for this $H_2S$ monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration

measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

8. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

9. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these

systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, LP gas, and/or natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.

   The permittee shall submit an $H_2S$ excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot of fuel gas burned. Written reports of excess emissions shall include the following information:

   a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

   b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

   c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

   d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

4. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

5. The permittee shall submit a quarterly report for each CEMS, containing the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

## V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

      20% opacity as a 6-minute average

      Applicable Compliance Method:

      If required, compliance shall be demonstrated based upon the procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

   b. Emission Limitation:

      0.020 pound of particulate emissions per million Btu of actual heat input

      Applicable Compliance Method:

      If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

   c. Emission Limitation:

      0.10 grain $H_2S$ per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

## VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **B015**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| B015 - Crude 1 Heater, 280 mmBtu per hr (PR-2954) | OAC rule 3745-31-02(A)(2) (PTI 04-01290 as issued on July 25, 2002) | See sections A.I.2.a, A.I.2.b, and A.I.2.c. |
| | OAC rule 3745-17-07(A) | Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule. |
| | OAC rule 3745-17-10(B) | 0.020 pound of particulate emissions per million Btu of actual heat input |
| | OAC rule 3745-18-54(W)(1) | See section A.I.2.d. |

**2. Additional Terms and Conditions**

**2.a** This permit to install incorporates the emission limits and schedules set out in paragraphs 14-18 and 21 of the Consent Decree (United States of America, et al., v. BP Exploration & Oil Co., et al., Civil Action No. 2:96CV095 RL).

**2.b** The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot, except during periods of startup, shutdown or malfunction of the refinery fuel gas amine systems provided that BP shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

**2.c** By no later than September 30, 2003, this emissions unit shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices.

**2.d** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2).

## II. Operational Restrictions

1. The permittee shall only burn natural gas, LP gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas, LP gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 0.10 grain per dry standard cubic foot as a volume-weighted, rolling, 3-hour average.

## III. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas, LP gas, or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the $H_2S$ content in the fuel gas before being burned in this fuel gas combustion device.

   a. The $H_2S$ monitoring device shall continuously monitor and record the concentration (dry basis) of $H_2S$ in fuel gases before being burned in any fuel gas combustion device.

   b. The span value for this instrument is 425 mg/dscm $H_2S$.

   c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of $H_2S$ in the fuel gas being burned.

   d. The performance evaluations for this $H_2S$ monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration

measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

8. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

9. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these

systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, LP gas, and/or natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.

   The permittee shall submit an $H_2S$ excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot of fuel gas burned. Written reports of excess emissions shall include the following information:

   a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

   b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

   c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

   d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

4. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

5. The permittee shall submit a quarterly report for each CEMS, containing the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

## V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

      20% opacity as a 6-minute average

      Applicable Compliance Method:

      If required, compliance shall be demonstrated based upon the procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

   b. Emission Limitation:

      0.020 pound of particulate emissions per million Btu of actual heat input

      Applicable Compliance Method:

      If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

   c. Emission Limitation:

      0.10 grain $H_2S$ per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

## VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **B016**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| B016 - Coker 1 Furnace, 91 mmBtu per hr (PR-2940) | OAC rule 3745-31-02(A)(2) (PTI 04-01290 as issued on July 25, 2002) | See sections A.I.2.a, A.I.2.b, and A.I.2.c. |
| | OAC rule 3745-31-05(D) (PTI 04-1046 as modified on August 5, 1998) | See sections A.II.3 and A.II.4 |
| | OAC rule 3745-17-07(A) | Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule. |
| | OAC rule 3745-17-10(B) | 0.020 pound of particulate emissions per million Btu of actual heat input |
| | OAC rule 3745-18-54(W)(1) | See section A.I.2.d. |

**2. Additional Terms and Conditions**

**2.a** This permit to install incorporates the emission limits and schedules set out in paragraphs 14-18 and 21 of the Consent Decree (United States of America, et al., v. BP Exploration & Oil Co., et al., Civil Action No. 2:96CV095 RL).

**2.b** The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot, except during periods of startup, shutdown or malfunction of the refinery fuel gas amine systems provided that BP shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

**2.c** By no later than September 30, 2003, this emissions unit shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices.

**2.d** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2).

## II. Operational Restrictions

1. The permittee shall only burn natural gas, LP gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas, LP gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 0.10 grain per dry standard cubic foot as a volume-weighted, rolling, 3-hour average.

3. This emissions unit shall be limited to an input capacity of 262,800 mmBtu/yr based on a rolling, 12-month summation of the monthly firing rates.

4. The permittee shall continue to implement the Preventive Maintenance and Malfunction Abatement Plan (PMMAP) for this emissions unit from the time of startup so as to minimize excess emissions. The plan may be revised and resubmitted in the future subject to Ohio EPA review and comment. The PMMAP shall include the following:

   a. a description of the items or conditions that will be inspected, the frequency of these inspections or repairs, and an identification of the types and quantities of replacement parts which will be maintained in inventory for quick replacement;

   b. an identification of the emissions unit and the operating outlet variables of the air pollution control equipment that will be monitored in order to detect a malfunction or failure, the normal operating range of these variables, and a description of the monitoring or surveillance procedures and of the method of informing operating personnel of any malfunction, including alarm systems, lights and/or other indicators; and,

   c. a description of the corrective procedures that will be taken in the event of a malfunction or failure in order to achieve compliance with any applicable law or permit limit as expeditiously as practicable.

## III. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas, LP gas, or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall monitor and record the monthly total firing rate in terms of standard cubic feet and the monthly average heating value of the fuel gas fired. From these data, the permittee shall calculate and record the monthly total firing rate in terms of mmBtu in accordance with the procedures in A.V and shall calculate and record the rolling, 12-month summation of the monthly firing rates in mmBtu per rolling, 12-month period.

3. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the $H_2S$ content in the fuel gas before being burned in this fuel gas combustion device.

   a. The $H_2S$ monitoring device shall continuously monitor and record the concentration (dry basis) of $H_2S$ in fuel gases before being burned in any fuel gas combustion device.

   b. The span value for this instrument is 425 mg/dscm $H_2S$.

   c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of $H_2S$ in the fuel gas being burned.

   d. The performance evaluations for this $H_2S$ monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

4. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

5. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

6. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

7. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as

follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

8. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

9. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

10. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

11. The permittee shall maintain records to verify that the Preventive Maintenance and Malfunction Abatement Plan is being implemented and the content of the of the PMMAP has been met.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, LP gas, and/or natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. The permittee shall submit quarterly deviation (excursion) reports that identify each month when the rolling, 12-month summation of the monthly firing rate exceeded 262,800 mmBtu.

3. The deviation reports under shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

4. The permittee shall submit an $H_2S$ excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling, 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot of fuel gas burned. Written reports of excess emissions shall include the following information:

   a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

   b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

   c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

   d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

5. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

   a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

c. The permittee shall submit a quarterly report for each CEMS containing the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

i. Permittee name and address.

ii. Identification and location of monitors in the CEMS.

ii Manufacturer and model number of each monitor in the CEMS.

iv. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

v. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

vi. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

## V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

b. Emission Limitation:

0.020 pound of particulate emissions per million Btu of actual heat input

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

c. Emission Limitation:

0.10 grain $H_2S$ per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

d. Emission Limitation:

This emissions unit shall be limited to an input capacity of 262,800 mmBtu/yr based on a rolling, 12-month summation of the monthly firing rates.

Applicable Compliance Method:

Multiply the monthly average mmscf of fuel burned by the monthly average Btu content (mmBtu/mmscf) to get the monthly total. Add the monthly total to the total for the previous 11 months to determine the rolling, 12-month total mmBtu/yr.

## VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the

CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

2. The terms and conditions of this PTI shall supersede the terms and conditions for this emissions unit established by PTI application number 04-1046 modified on August 5, 1998.

3. Nothing in this permit related to the PMMAP shall be construed to relieve the permittee from its obligation to comply with the requirements of OAC rule 3745-15-06(A) and (B), and OAC rule 3750-25-25 (related to toxic release reporting). Nothing in the permit related to the PMMAP shall modify or limit the Director's authority under OAC rule 3745-15-06(D) to require a preventive maintenance and malfunction abatement plan which is acceptable to the Director if, as the rule states, in the judgement of the Director, such a plan is needed for any emissions units at this facility.

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| B017 - Coker 2 Furnace, 72 mmBtu per hr (PR-2941) | OAC rule 3745-31-02(A)(2) (PTI 04-01290 as issued on July 25, 2002) | See sections A.I.2.a, A.I.2.b, and A.I.2.c. |
| | OAC rule 3745-17-07(A) | Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule. |
| | OAC rule 3745-17-10(B) | 0.020 pound of particulate emissions per million Btu of actual heat input |
| | OAC rule 3745-18-54(W)(1) | See sections A.I.2.d. |

**2. Additional Terms and Conditions**

**2.a** This permit to install incorporates the emission limits and schedules set out in paragraphs 14-18 and 21 of the Consent Decree (United States of America, et al., v. BP Exploration & Oil Co., et al., Civil Action No. 2:96CV095 RL).

**2.b** The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot, except during periods of startup, shutdown or malfunction of the refinery fuel gas amine systems provided that BP shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

**2.c** By no later than September 30, 2003, this emissions unit shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices.

**2.d** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2).

## II. Operational Restrictions

1. The permittee shall only burn natural gas, LP gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas, LP gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 0.10 grain per dry standard cubic foot as a volume-weighted, rolling, 3-hour average.

## III. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas, LP gas, or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the $H_2S$ content in the fuel gas before being burned in this fuel gas combustion device.

   a. The $H_2S$ monitoring device shall continuously monitor and record the concentration (dry basis) of $H_2S$ in fuel gases before being burned in any fuel gas combustion device.

   b. The span value for this instrument is 425 mg/dscm $H_2S$.

   c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of $H_2S$ in the fuel gas being burned.

   d. The performance evaluations for this $H_2S$ monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration

measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

8. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

9. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these

systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, LP gas, and/or natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.

   The permittee shall submit an $H_2S$ excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot of fuel gas burned. Written reports of excess emissions shall include the following information:

   a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

   b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

   c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

   d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

4. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

5. The permittee shall submit a quarterly report for each CEMS, containing the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

## V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

      20% opacity as a 6-minute average

      Applicable Compliance Method:

      If required, compliance shall be demonstrated based upon the procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

   b. Emission Limitation:

      0.020 pound of particulate emissions per million Btu of actual heat input

      Applicable Compliance Method:

      If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

   c. Emission Limitation:

      0.10 grain $H_2S$ per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

## VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **B018**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| B018 - FCC Preheat Furnace, 103 mmBtu per hr (PR-2955) | OAC rule 3745-31-02(A)(2) (PTI 04-01290 as issued on July 25, 2002) | See sections A.I.2.a. A.I.2.b, and A.I.2.c. |
| | OAC rule 3745-17-07(A) | Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule. |
| | OAC rule 3745-17-10(B) | 0.020 pound of particulate emissions per million Btu of actual heat input |
| | OAC rule 3745-18-54(W)(5) | See section A.I.2.d. |

**2. Additional Terms and Conditions**

**2.a** This permit to install incorporates the emission limits and schedules set out in paragraphs 14-18 and 21 of the Consent Decree (United States of America, et al., v. BP Exploration & Oil Co., et al., Civil Action No. 2:96CV095 RL).

**2.b** The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot, except during periods of startup, shutdown or malfunction of the refinery fuel gas amine systems provided that BP shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

**2.c** By no later than September 30, 2003, this emissions unit shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices.

**2.d** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2).

## II. Operational Restrictions

1. The permittee shall only burn natural gas, LP gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas, LP gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 0.10 grain per dry standard cubic foot as a volume-weighted, rolling, 3-hour average.

## III. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas, LP gas, or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the $H_2S$ content in the fuel gas before being burned in this fuel gas combustion device.

   a. The $H_2S$ monitoring device shall continuously monitor and record the concentration (dry basis) of $H_2S$ in fuel gases before being burned in any fuel gas combustion device.

   b. The span value for this instrument is 425 mg/dscm $H_2S$.

   c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of $H_2S$ in the fuel gas being burned.

   d. The performance evaluations for this $H_2S$ monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration

measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

8. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

9. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these

systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, LP gas, and/or natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.

   The permittee shall submit an $H_2S$ excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot of fuel gas burned. Written reports of excess emissions shall include the following information:

   a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

   b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

   c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

   d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

4. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

5. The permittee shall submit a quarterly report for each CEMS containing the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

## V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

      20% opacity as a 6-minute average

      Applicable Compliance Method:

      If required, compliance shall be demonstrated based upon the procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

   b. Emission Limitation:

      0.020 pound of particulate emissions per million Btu of actual heat input

      Applicable Compliance Method:

      If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

   c. Emission Limitation:

      0.10 grain $H_2S$ per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

## VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **B019**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| B019 - Crude Vac 2 Furnace, 240 mmBtu per hr (PR-2945) | OAC rule 3745-31-02(A)(2) (PTI 04-01290 as issued on July 25, 2002) | See sections A.I.2.a, A.I.2.b, and A.I.2.c. |
| | OAC rule 3745-31-05(D) (PTI 04-1046 as modified on August 5, 1998) | 262.8 tons per year nitrogen oxides ($NO_x$) based on a rolling, 12-month summation of the monthly emissions<br><br>21.02 tons per year sulfur dioxide ($SO_2$) based on a rolling, 12-month summation of the monthly emissions<br><br>See section A.II.3. |
| | OAC rule 3745-17-07(A) | Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule. |
| | OAC rule 3745-17-10(B) | 0.020 pound of particulate emissions per million Btu of actual heat input |
| | OAC rule 3745-18-54(W)(1) | See section A.I.2.d. |

#### 2. Additional Terms and Conditions

**2.a** This permit to install incorporates the emission limits and schedules set out in paragraphs 14-18 and 21 of the Consent Decree (United States of America, et al., v. BP Exploration & Oil Co., et al., Civil Action No. 2:96CV095 RL).

**2.b** The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot, except during periods of startup, shutdown or

malfunction of the refinery fuel gas amine systems provided that BP shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

**2.c** By no later than September 30, 2003, this emissions unit shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices.

**2.d** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2).

## II. Operational Restrictions

1. The permittee shall only burn natural gas, LP gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas, LP gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 0.10 grain per dry standard cubic foot as a volume-weighted, rolling, 3-hour average.

3. The permittee shall continue to implement the Preventive Maintenance and Malfunction Abatement Plan (PMMAP) for this emissions unit from the time of startup so as to minimize excess emissions. The plan may be revised and resubmitted in the future subject to Ohio EPA review and comment. The PMMAP shall include the following:

   a. a description of the items or conditions that will be inspected, the frequency of these inspections or repairs, and an identification of the types and quantities of replacement parts which will be maintained in inventory for quick replacement;

   b. an identification of the emissions unit and the operating outlet variables of the air pollution control equipment that will be monitored in order to detect a malfunction or failure, the normal operating range of these variables, and a description of the monitoring or surveillance procedures and of the method of informing operating personnel of any malfunction, including alarm systems, lights and/or other indicators; and,

   c. a description of the corrective procedures that will be taken in the event of a malfunction or failure in order to achieve compliance with any applicable law or permit limit as expeditiously as practicable.

## III. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas, LP gas, or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall monitor and record the hourly, daily and monthly average firing rate in terms of standard cubic feet per hour. From these data, the permittee shall calculate and maintain records of the monthly and rolling, 12-month total $NO_x$ emission rates in units of tons per month and tons per year in accordance with the procedure outlined in section V.

3. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the $H_2S$ content in the fuel gas before being burned in this fuel gas combustion device.

   a. The $H_2S$ monitoring device shall continuously monitor and record the concentration (dry basis) of $H_2S$ in fuel gases before being burned in any fuel gas combustion device.

   b. The span value for this instrument is 425 mg/dscm $H_2S$.

   c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of $H_2S$ in the fuel gas being burned.

   d. The performance evaluations for this $H_2S$ monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

4. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

5. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

6. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD

check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

7. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

8. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

9. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

10. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

11. The permittee shall maintain records of the monthly average net $H_2S$ of the fuel burned in this emissions unit.

12. The permittee shall maintain records to verify that the Preventive Maintenance and Malfunction Abatement Plan is being implemented and the content of the of the PMMAP has been met.

## IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each day when the $NO_{x.}$ emissions exceed 262.8 tons/yr based on a rolling, 12-month summation of the monthly emissions. The permittee shall submit deviation (excursion) reports that identify each day when the $SO_{2.}$ emissions exceed 21.02 tons/yr based on a rolling, 12-month summation of the monthly emissions.

2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, LP gas, and/or natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

3. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

4. The permittee shall submit an $H_2S$ excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot of fuel gas burned. Written reports of excess emissions shall include the following information:

   a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

   b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

   c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

   d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

5. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

   a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

   b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

   c. The permittee shall submit a quarterly report for each CEMS containing the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

      i. Permittee name and address.

      ii. Identification and location of monitors in the CEMS.

      iii. Manufacturer and model number of each monitor in the CEMS.

      iv. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

      v. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

vi. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

6. Unless otherwise specified above, the reports required to be submitted under A.IV shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

## V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

b. Emission Limitation:

0.020 pound of particulate emissions per million Btu of actual heat input

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

c. Emission Limitation:

0.10 grain $H_2S$ per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

d. Emission Limitation:

262.8 tons per year $NO_x$ based on a rolling, 12-month summation of the monthly emissions

Applicable Compliance Method:

If required, the permittee shall establish a new $NO_x$ emission factor in units of pounds $NO_x$ per million Btu of heat input using Methods 3A, 7E and 19 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA. Multiply the stack test derived emission factor by the monthly average hourly fuel gas burned to determine the monthly total $NO_x$ emissions. Add the monthly total $NO_x$ emissions to the total $NO_x$ emissions for the previous 11 months to determine the rolling, 12-month total $NO_x$ emissions.

e. Emission Limitation:

21.02 tons per year $SO_2$ based on a rolling, 12-month summation of the monthly emissions

Applicable Compliance Method:

Multiply the monthly average net $H_2S$ concentration by the monthly total gas flow to determine the lbs $H_2S$ per month. Convert $H_2S$ to $SO_2$ at a rate of 34 pounds $H_2S$ to 64 pounds $SO_2$ emissions. Add the monthly total to the total for the previous 11 calendar months to determine the rolling, 12-month total $SO_2$ emissions.

2. Emission testing requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within 6 months prior to permit expiration.

b. The emission testing shall be conducted to establish a new $NO_x$ emission factor in units of pounds $NO_x$ per million Btu of actual heat input for nitrogen oxides.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Methods 3A, 7E and 19 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Toledo Division of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Toledo Division of Environmental Services's refusal to accept the results of the emission test(s).

Personnel from the Toledo Division of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Toledo Division of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Toledo Division of Environmental Services.

## VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

2. The terms and conditions of this PTI shall supersede the terms and conditions for this emissions unit established by PTI application number 04-1046 modified on August 5, 1998.

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| B020 - Power Boiler, 291 mmBtu per hr (PR-2967) | OAC rule 3745-31-02(A)(2) (PTI 04-01290 as issued on July 25, 2002) | See sections A.I.2.a, A.I.2.b, and A.I.2.c. |
| | OAC rule 3745-17-07(A) | Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule. |
| | OAC rule 3745-17-10(B) | 0.020 pound of particulate emissions per million Btu of actual heat input |
| | OAC rule 3745-18-54(W)(5) | See section A.I.2.d. |

**2. Additional Terms and Conditions**

**2.a** This permit to install incorporates the emission limits and schedules set out in paragraphs 14-18 and 21 of the Consent Decree (United States of America, et al., v. BP Exploration & Oil Co., et al., Civil Action No. 2:96CV095 RL).

**2.b** The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot, except during periods of startup, shutdown or malfunction of the refinery fuel gas amine systems provided that BP shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

**2.c** By no later than September 30, 2003, this emissions unit shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices.

**2.d** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2).

## II. Operational Restrictions

1. The permittee shall only burn natural gas, LP gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas, LP gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 0.10 grain per dry standard cubic foot as a volume-weighted, rolling, 3-hour average.

## III. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas, LP gas, or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the $H_2S$ content in the fuel gas before being burned in this fuel gas combustion device.

   a. The $H_2S$ monitoring device shall continuously monitor and record the concentration (dry basis) of $H_2S$ in fuel gases before being burned in any fuel gas combustion device.

   b. The span value for this instrument is 425 mg/dscm $H_2S$.

   c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of $H_2S$ in the fuel gas being burned.

   d. The performance evaluations for this $H_2S$ monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration

measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

8. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

9. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these

systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, LP gas, and/or natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.

   The permittee shall submit an $H_2S$ excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot of fuel gas burned. Written reports of excess emissions shall include the following information:

   a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

   b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

   c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

   d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

4. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

5. The permittee shall submit a quarterly report for each CEMS containing the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

## V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

      20% opacity as a 6-minute average

      Applicable Compliance Method:

      If required, compliance shall be demonstrated based upon the procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

   b. Emission Limitation:

      0.020 pound of particulate emissions per million Btu of actual heat input

      Applicable Compliance Method:

      If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

   c. Emission Limitation:

      0.10 grain $H_2S$ per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

## VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **B022**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| B022 - Naptha Treater Heater, 72 mmBtu per hr (PR-2958) | OAC rule 3745-31-02(A)(2) (PTI 04-01290 as issued on July 25, 2002) | See sections A.I.2.a, A.I.2.b, and A.I.2.c. |
| | OAC rule 3745-17-07(A) | Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule. |
| | OAC rule 3745-17-10(B) | 0.020 pound of particulate emissions per million Btu of actual heat input |
| | OAC rule 3745-18-54(W)(1) | See section A.I.2.d. |

**2. Additional Terms and Conditions**

**2.a** This permit to install incorporates the emission limits and schedules set out in paragraphs 14-18 and 21 of the Consent Decree (United States of America, et al., v. BP Exploration & Oil Co., et al., Civil Action No. 2:96CV095 RL).

**2.b** The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot, except during periods of startup, shutdown or malfunction of the refinery fuel gas amine systems provided that BP shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

**2.c** By no later than September 30, 2003, this emissions unit shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices.

**2.d** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-02(A)(2).

## II. Operational Restrictions

1. The permittee shall only burn natural gas, LP gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas, LP gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 0.10 grain per dry standard cubic foot as a volume-weighted, rolling, 3-hour average.

## III. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas, LP gas, or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the $H_2S$ content in the fuel gas before being burned in this fuel gas combustion device.

   a. The $H_2S$ monitoring device shall continuously monitor and record the concentration (dry basis) of $H_2S$ in fuel gases before being burned in any fuel gas combustion device.

   b. The span value for this instrument is 425 mg/dscm $H_2S$.

   c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of $H_2S$ in the fuel gas being burned.

   d. The performance evaluations for this $H_2S$ monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration

measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

8. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

9. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these

systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, LP gas, and/or natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.

   The permittee shall submit an $H_2S$ excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot of fuel gas burned. Written reports of excess emissions shall include the following information:

   a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

   b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

   c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

   d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

4. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

5. The permittee shall submit a quarterly report for each CEMS containing the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

## V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

      20% opacity as a 6-minute average

      Applicable Compliance Method:

      If required, compliance shall be demonstrated based upon the procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

   b. Emission Limitation:

      0.020 pound of particulate emissions per million Btu of actual heat input

      Applicable Compliance Method:

      If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

   c. Emission Limitation:

      0.10 grain $H_2S$ per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

## VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **B029**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| B029 - 22.8 mmBtu per hour heater fired with refinery fuel gas and/or natural gas (ADHT Furnace) | OAC rule 3745-17-07(A) | Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule. |
| | OAC rule 3745-17-10(B) | 0.020 pound of particulate emissions per million Btu of actual heat input |
| | OAC rule 3745-18-54(W)(1) | See section A.I.2.a. |
| | OAC rule 3745-31-05(A)(3) (PTI 04-708 as modified on August 5, 1998) | 1.45 pounds per hour and 6.35 tons per year carbon monoxide (CO) |
| | | 1.60 pounds per hour and 6.99 tons per year nitrogen oxides ($NO_x$) |
| | | 0.15 pound per hour and 0.64 ton per year particulate emissions |
| | | 2.53 tons sulfur dioxide ($SO_2$) per year |
| | | 0.07 pound per hour and 0.29 ton per year volatile organic compounds (VOC) |
| | | See section A.I.2.b. |
| | 40 CFR Part 60, Subpart J | See section A.I.2.c. |

**2. Additional Terms and Conditions**

2.a The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2.b The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart J.

2.c The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average $H_2S$ concentration greater than 230 milligrams per dry standard cubic meter (0.10 grain per dry standard cubic foot).

## II. Operational Restrictions

1. The permittee shall only burn natural gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 230 milligrams per dry standard cubic meter (0.10 grain per dry standard cubic foot) as a volume-weighted, rolling, 3-hour average.

## III. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the $H_2S$ content in the fuel gas before being burned in this fuel gas combustion device.

   a. The $H_2S$ monitoring device shall continuously monitor and record the concentration (dry basis) of $H_2S$ in fuel gases before being burned in any fuel gas combustion device.

   b. The span value for this instrument is 425 mg/dscm $H_2S$.

   c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of $H_2S$ in the fuel gas being burned.

   d. The performance evaluations for this $H_2S$ monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of

40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in Appendix B of 40 CFR part 60 for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

8. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

9. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas and/or natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.

   The permittee shall submit an $H_2S$ excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot of fuel gas burned. Written reports of excess emissions shall include the following information:

   a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

   b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

   c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

   d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

4. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA.

One summary report form shall be submitted for each pollutant monitored at each affected facility.

a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

5. The permittee shall submit a quarterly report for each CEMS containing the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

## V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

   20% opacity as a 6-minute average

   Applicable Compliance Method:

   If required, compliance shall be demonstrated based upon the procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

   b. Emission Limitation:

   0.020 pound of particulate emissions per million Btu of actual heat input

   Applicable Compliance Method:

   If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

   c. Emission Limitation:

   0.10 grain $H_2S$ per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

   Applicable Compliance Method:

   Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

   d. Emission Limitation:

   1.45 pounds per hour CO

   Applicable Compliance Method:

   Multiply the AP-42 emission factor of 40 lb/mmcf of fuel gas burned times the total fuel gas burned per hour times the fuel gas heating value correction factor. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1000 Btu/scf. If required, compliance shall be demonstrated based upon the procedures specified in Methods 1 through 4 and

10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

e. Emission Limitation:

6.35 tons per year CO

Applicable Compliance Method:

Annual allowable emissions are based on operation at maximum capacity for 8760 hours per year. Compliance with the hourly CO limit constitutes compliance with the annual CO limit.

f. Emission Limitation:

0.15 pound per hour particulate emissions

Applicable Compliance Method:

If required, multiply the AP-42 emission factor of 0.3 lb/mmcf of fuel gas burned times the total fuel gas burned per hour times the fuel gas heating value correction factor. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1000 Btu/scf. If required, compliance shall be demonstrated based upon the procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

g. Emission Limitation:

0.64 ton per year particulate emissions

Applicable Compliance Method:

Annual allowable emissions are based on operation at maximum capacity for 8760 hours per year. Compliance with the hourly CO limit constitutes compliance with the annual CO limit.

h. Emission Limitation:

1.60 pounds per hour $NO_x$

Applicable Compliance Method:

Multiply the BP $NO_x$ emission factor of 0.07 lb/mmBtu by the hourly fuel gas burned to determine the hourly $NO_x$ emissions. If required, compliance shall be demonstrated based upon the procedures specified in Methods 1 through 4 and 7

of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

i. Emission Limitation:

6.99 tons per year $NO_x$

Applicable Compliance Method:

Annual allowable emissions are based on operation at maximum capacity for 8760 hours per year. Compliance with the hourly $NO_x$ limit constitutes compliance with the annual limit.

j. Emission Limitation:

0.07 pound per hour VOC

Applicable Compliance Method:

Multiply the AP-42 emission factor of 2.78 lb/mmcf of fuel gas burned corrected for heating value by the actual amount of fuel gas burned. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1000 Btu/scf. If required, compliance shall be demonstrated based upon the procedures specified in Methods 1 through 4 and 25 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

k. Emission Limitation:

0.29 ton per year VOC

Applicable Compliance Method:

Annual allowable emissions are based upon operation at maximum capacity for 8760 hours per year. Compliance with the hourly VOC emissions limit constitutes compliance with the annual limit.

l. Emission Limitation:

2.53 tons per year $SO_2$

Applicable Compliance Method:

Annual allowable emissions are based upon operation at maximum capacity for 8760 hours per year. Compliance with A.V.1.c constitutes compliance with the annual $SO_2$ limit.

## VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **B030**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| B030 - 57.6 mmBtu per hour heater fired with refinery fuel gas and/or natural gas (BDHT Furnace) | OAC rule 3745-17-07(A) | Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule. |
| | OAC rule 3745-17-10(B) | 0.020 pound of particulate emissions per million Btu of actual heat input |
| | OAC rule 3745-18-54(W)(1) | See section A.I.2.a. |
| | OAC rule 3745-31-05(A)(3) (PTI 04-708 as modified on August 5, 1998) | 3.66 pounds per hour and 16.06 tons per year carbon monoxide (CO) |
| | | 4.03 pounds per hour and 17.66 tons per year nitrogen oxides ($NO_x$) |
| | | 0.3 pound per hour and 1.31 tons per year particulate emissions |
| | | 6.39 tons sulfur dioxide ($SO_2$) per year |
| | | 0.17 pound per hour and 0.74 ton per year volatile organic compounds (VOC) |
| | | See section A.I.2.b. |
| | 40 CFR Part 60, Subpart J | See section A.I.2.c. |

**2. Additional Terms and Conditions**

2.a The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2.b The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart J.

2.c The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average $H_2S$ concentration greater than 230 milligrams per dry standard cubic meter (0.10 grain per dry standard cubic foot).

## II. Operational Restrictions

1. The permittee shall only burn natural gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 230 milligrams per dry standard cubic meter (0.10 grain per dry standard cubic foot) as a volume-weighted, rolling, 3-hour average.

## III. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the $H_2S$ content in the fuel gas before being burned in this fuel gas combustion device.

   a. The $H_2S$ monitoring device shall continuously monitor and record the concentration (dry basis) of $H_2S$ in fuel gases before being burned in any fuel gas combustion device.

   b. The span value for this instrument is 425 mg/dscm $H_2S$.

   c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of $H_2S$ in the fuel gas being burned.

   d. The performance evaluations for this $H_2S$ monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of

40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in Appendix B of 40 CFR part 60 for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

8. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

9. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas and/or natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.

   The permittee shall submit an $H_2S$ excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot of fuel gas burned. Written reports of excess emissions shall include the following information:

   a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

   b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

   c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

   d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

4. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA.

One summary report form shall be submitted for each pollutant monitored at each affected facility.

a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

5. The permittee shall submit a quarterly report for each CEMS containing the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

## V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

   20% opacity as a 6-minute average

   Applicable Compliance Method:

   If required, compliance shall be demonstrated based upon the procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

   b. Emission Limitation:

   0.020 pound of particulate emissions per million Btu of actual heat input

   Applicable Compliance Method:

   If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

   c. Emission Limitation:

   0.10 grain $H_2S$ per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

   Applicable Compliance Method:

   Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

   d. Emission Limitation:

   3.66 pounds per hour CO

   Applicable Compliance Method:

   Multiply the AP-42 emission factor of 40 lb/mmcf of fuel gas burned times the total fuel gas burned per hour times the fuel gas heating value correction factor. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1000 Btu/scf. If required, compliance shall be demonstrated based upon the procedures specified in Methods 1 through 4 and

10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

e. Emission Limitation:

16.06 tons per year CO

Applicable Compliance Method:

Annual allowable emissions are based on operation at maximum capacity for 8760 hours per year. Compliance with the hourly CO limit constitutes compliance with the annual CO limit.

f. Emission Limitation:

0.3 pound per hour particulate emissions

Applicable Compliance Method:

Multiply the AP-42 emission factor of 0.3 lb/mmcf of fuel gas burned times the total fuel gas burned per hour times the fuel gas heating value correction factor. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1000 Btu/scf. If required, compliance shall be demonstrated based upon the procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

g. Emission Limitation:

1.31 tons per year particulate emissions

Applicable Compliance Method:

Annual allowable emissions are based on operation at maximum capacity for 8760 hours per year. Compliance with the hourly CO limit constitutes compliance with the annual CO limit.

h. Emission Limitation:

4.03 pounds per hour $NO_x$

Applicable Compliance Method:

Multiply the BP $NO_x$ emission factor of 0.07 lb/mmBtu by the hourly fuel gas burned to determine the hourly $NO_x$ emissions. If required, compliance shall be demonstrated based upon the procedures specified in Methods 1 through 4 and 7

of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

i. Emission Limitation:

17.66 tons per year $NO_x$

Applicable Compliance Method:

Annual allowable emissions are based on operation at maximum capacity for 8760 hours per year. Compliance with the hourly $NO_x$ limit constitutes compliance with the annual limit.

j. Emission Limitation:

0.17 pound per hour VOC

Applicable Compliance Method:

Multiply the AP-42 emission factor of 2.78 lb/mmcf of fuel gas burned corrected for heating value by the actual amount of fuel gas burned. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1000 Btu/scf. If required, compliance shall be demonstrated based upon the procedures specified in Methods 1 through 4 and 25 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

k. Emission Limitation:

0.74 ton per year VOC

Applicable Compliance Method:

Annual allowable emissions are based upon operation at maximum capacity for 8760 hours per year. Compliance with the hourly VOC emissions limit constitutes compliance with the annual limit.

l. Emission Limitation:

6.39 tons per year $SO_2$

Applicable Compliance Method:

Annual allowable emissions are based upon operation at maximum capacity for 8760 hours per year. Compliance with A.V.1.c constitutes compliance with the annual $SO_2$ limit.

## VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **B031**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| B031 - 130 mmBtu per hour heater fired with refinery fuel gas and/or natural gas (Vac 1 Furnace) | OAC rule 3745-17-07(A) | Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule. |
| | OAC rule 3745-17-10(B) | 0.020 pound of particulate emissions per million Btu of actual heat input |
| | OAC rule 3745-18-54(W)(1) | See section A.I.2.a. |
| | OAC rule 3745-23-06(B) | See section A.I.2.d. |
| | OAC rule 3745-31-05(A)(3) (PTI 04-959 as issued on October 18, 1995) | 40 pounds per million standard cubic feet of fuel gas burned and 4.2 pounds per hour of carbon monoxide (CO)<br><br>0.07 pound per million Btu of actual heat input and 9.1 pounds per hour of nitrogen oxides ($NO_x$)<br><br>2.5 pounds per million standard cubic feet of fuel gas burned and 0.3 pound per hour of particulate emissions<br><br>2.8 pounds per hour of sulfur dioxide ($SO_2$)<br><br>1.7 pounds per million standard cubic feet of fuel gas burned and 0.2 pound per hour of organic compounds (OC)<br><br>See section A.I.2.b. |

| | |
|---|---|
| 40 CFR Part 60, Subpart J | See section A.I.2.c. |

**2. Additional Terms and Conditions**

2.a The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2.b The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart J.

2.c The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average $H_2S$ concentration greater than 230 milligrams per dry standard cubic meter (0.10 grain per dry standard cubic foot).

2.d The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 04-959.

## II. Operational Restrictions

1. The permittee shall only burn natural gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 230 milligrams per dry standard cubic meter (0.10 grain per dry standard cubic foot) as a volume-weighted, rolling, 3-hour average.

## III. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the $H_2S$ content in the fuel gas before being burned in this fuel gas combustion device.

   a. The $H_2S$ monitoring device shall continuously monitor and record the concentration (dry basis) of $H_2S$ in fuel gases before being burned in any fuel gas combustion device.

   b. The span value for this instrument is 425 mg/dscm $H_2S$.

c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of $H_2S$ in the fuel gas being burned.

d. The performance evaluations for this $H_2S$ monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in Appendix B of 40 CFR part 60 for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

8. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

9. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas and/or natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.

   The permittee shall submit an $H_2S$ excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot of fuel gas burned. Written reports of excess emissions shall include the following information:

   a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

4. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

5. The permittee shall submit a quarterly report for each CEMS containing the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy

for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

## V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

b. Emission Limitation:

0.020 pound of particulate emissions per million Btu of actual heat input

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

c. Emission Limitation:

0.10 grain $H_2S$ per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

d. Emission Limitation:

40 lbs CO/mmscf fuel gas burned

Applicable Compliance Method:

This emission factor was obtained from AP-42. The operational restriction of A.II.1 shall serve as a demonstration of compliance with this limit. If required, the permittee shall demonstrate compliance using Method 10 of 40 CFR part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

e. Emission Limitation:

4.2 pounds per hour CO

Applicable Compliance Method

Multiply the AP-42 emission factor of 40 lb/mmcf of fuel gas burned times the total fuel gas burned per hour times the fuel gas heating value correction factor. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1000 Btu/scf. If required, compliance shall be demonstrated based upon the procedures specified in Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

f. Emission Limitation:

0.3 pound per hour particulate emissions

Applicable Compliance Method:

If required, multiply the AP-42 emission factor of 1.9 lb/mmcf of fuel gas burned times the total fuel gas burned per hour times the fuel gas heating value correction factor. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1000 Btu/scf. If required, the permittee shall demonstrate compliance using Methods 1-5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

g. Emission Limitation:

2.5 pounds particulate emissions per mmcf of fuel gas burned

Applicable Compliance Method:

Compliance with the operational restriction of A.II.1 shall serve as demonstration of compliance with this limit. If required, the permittee shall demonstrate compliance using Methods 1-5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

h. Emission Limitation:

9.1 pounds per hour $NO_x$

Applicable Compliance Method:

Mmultiply the BP $NO_x$ emission factor of 0.07 lb/mmBtu by the hourly fuel gas burned to determine the hourly $NO_x$ emissions. If required, compliance shall be demonstrated according to Methods 1 through 4 and 7 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

i. Emission Limitation:

0.07 lb $NO_x$ per mmBtu of actual heat input

Applicable Compliance Method:

If required, compliance shall be demonstrated according to Methods 1 through 4 and 7 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

j. Emission Limitation:

0.2 pound per hour OC

Applicable Compliance Method:

Multiply the AP-42 emission factor of 2.78 lb/mmcf of fuel gas burned corrected for heating value by the actual amount of fuel gas burned. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1000 Btu/scf. If required, the permittee shall demonstrate compliance using Methods 1-4 and 25 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

k. Emission Limitation:

1.7 pounds OC per mmcf of fuel gas burned

Applicable Compliance Method:

Compliance with the operational restriction of A.II.1 shall serve as demonstration of compliance with this limit. If required, the permittee shall demonstrate compliance using Methods 1-4 and 25 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

l. Emission Limitation:

2.8 pounds per hour of $SO_2$

Applicable Compliance Method:

The hourly limit was calculated based on operation at maximum capacity burning fuel gas with a maximum hydrogen sulfide content of 0.10 gr/dscf. Compliance A.V.1.c constitutes compliance with the hourly $SO_2$ limit. If required, compliance shall be demonstrated according to Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

2. Emission testing requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for nitrogen oxides.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Toledo Division of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the

test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Toledo Division of Environmental Services's refusal to accept the results of the emission test(s).

Personnel from the Toledo Division of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Toledo Division of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Toledo Division of Environmental Services.

## VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **B032**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| B032 - 230 mmBtu per hour heater fired with refinery fuel gas and/or natural gas (Coker 3 Furnace) | OAC rule 3745-17-07(A) | Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule. |
| | OAC rule 3745-17-10(B) | 0.020 pound of particulate emissions per million Btu of actual heat input |
| | OAC rule 3745-18-54(W)(1) | See section A.I.2.a. |
| | OAC rule 3745-23-06(B) | See section A.I.2.d. |
| | OAC rule 3745-31-05(A)(3) (PTI 04-1046 as modified on August 5, 1998) | 13.8 pounds per hour and 40.3 tons per rolling, 12-month period of carbon monoxide (CO) |
| | | 24.15 pounds per hour and 70.52 tons per rolling, 12-month period of nitrogen oxides ($NO_x$) |
| | | 1.04 pounds per hour and 3.02 tons per rolling, 12-month period of particulate emissions |
| | | 20.46 tons per rolling, 12-month period of sulfur dioxide ($SO_2$) |
| | | 0.59 pound per hour and 1.71 tons per rolling, 12-month period of volatile organic compounds (VOC) |
| | | See section A.I.2.b. |

| | |
|---|---|
| 40 CFR Part 60, Subpart J | See section A.I.2.c. |

**2. Additional Terms and Conditions**

2.a The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2.b The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart J.

2.c The permittee shall not burn in this emissions unit any refinery fuel gas that has a volume-weighted, rolling, 3-hour average $H_2S$ concentration greater than 230 milligrams per dry standard cubic meter (0.10 grain per dry standard cubic foot).

2.d The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 04-1046.

## II. Operational Restrictions

1. The permittee shall only burn natural gas and/or refinery fuel gas in this emissions unit.

2. The quality of the natural gas and/or refinery fuel gas burned in this emissions unit shall meet, on an "as burned" basis, a sulfur content that is sufficient to comply with the allowable hydrogen sulfide emission limitation of 230 milligrams per dry standard cubic meter (0.10 grain per dry standard cubic foot) as a volume-weighted, rolling, 3-hour average.

## III. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a fuel other than refinery fuel gas or natural gas, the permittee shall maintain a record of the type, quantity, and heating value in Btu/dscf of the fuel burned.

2. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the $H_2S$ content in the fuel gas before being burned in this fuel gas combustion device.

   a. The $H_2S$ monitoring device shall continuously monitor and record the concentration (dry basis) of $H_2S$ in fuel gases before being burned in any fuel gas combustion device.

   b. The span value for this instrument is 425 mg/dscm $H_2S$.

c. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of $H_2S$ in the fuel gas being burned.

d. The performance evaluations for this $H_2S$ monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

3. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

4. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

5. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in Appendix B of 40 CFR part 60 for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

6. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

7. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

8. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

   a. Calibration of CEMS.
   b. CD determination and adjustment of CEMS.
   c. Preventive maintenance of CEMS (including spare parts inventory).
   d. Data recording, calculations, and reporting.
   e. Accuracy audit procedures including sampling and analysis methods.
   f. Program of corrective action for malfunctioning CEMS.

   As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

9. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

10. The permittee shall monitor and record the hourly, daily and monthly average firing rate in terms of standard cubic feet per hour. From these data, the permittee shall calculate and maintain records of the monthly and rolling12-month total CO, $NO_x$, PE, and VOC emission rates in units of tons per month and tons per year in accordance with the procedure outlined in section V.

## IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas and/or natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. The permittee shall submit deviation (excursion) reports that identify each day when the CO, $NO_x$, PE, and/or VOC pound per hour and/or rolling, 12-month emission limitations specified under A.I.1. Each report shall be submitted within 30 days after the deviation occurs.

3. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.

4. The permittee shall submit an $H_2S$ excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a

case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot of fuel gas burned. Written reports of excess emissions shall include the following information:

a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

4. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

5. The permittee shall submit a quarterly report for each CEMS containing the accuracy results from Section 6 and the CD assessment results from Section 4. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the

applicable subparts of this part. As a minimum, the DAR must contain the following information:

a. Permittee name and address.

b. Identification and location of monitors in the CEMS.

c. Manufacturer and model number of each monitor in the CEMS.

d. Assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

e. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.

f. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60, Appendix F, Procedure 1.

## V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

b. Emission Limitation:

0.020 pound of particulate emissions per million Btu of actual heat input

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

c. Emission Limitation:

0.10 grain $H_2S$ per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling, 3-hour average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements of section A.III. If required, compliance shall also be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

d. Emission Limitation:

20.46 tons per rolling, 12-month period of $SO_2$

Applicable Compliance Method

Annual allowable emissions are based on operation at maximum capacity for 8760 hours per year burning fuel gas with a maximum $H_2S$ concentration of 0.10 gr/dscf. Compliance with the hourly $H_2S$ limit constitutes compliance with the annual $SO_2$ limit.

e. Emission Limitation:

13.8 pounds per hour CO

Applicable Compliance Method

Multiply the AP-42 emission factor of 40 lb/mmcf of fuel gas burned times the total fuel gas burned per hour times the fuel gas heating value correction factor. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1000 Btu/scf. If required, the permittee shall demonstrate compliance using Methods 1 through 4 and 10 of 40 CFR part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

f. Emission Limitation:

40.3 tons per rolling, 12-month period CO

Applicable Compliance Method:

Multiply the AP-42 emission factor of 40 lb/mmcf of fuel gas burned times the total fuel gas burned per month times the fuel gas heating value correction factor and divide by 2000 pounds per ton. Add this total to the total for the previous 11 calendar months to obtain the rolling 12-month total emissions. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1000 Btu/scf. Annual allowable emissions are based on operation at maximum capacity for 8760 hours per year. Compliance with the hourly CO limit constitutes compliance with the annual CO limit.

g. Emission Limitation:

1.04 pound per hour particulate emissions

Applicable Compliance Method:

Multiply the AP-42 emission factor of 1.9 lb/mmcf of fuel gas burned times the total fuel gas burned per hour times the fuel gas heating value correction factor. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1000 Btu/scf. If required, the permittee shall demonstrate compliance using Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

h. Emission Limitation:

3.02 tons per rolling, 12-month period of particulate emissions

Applicable Compliance Method:

Multiply the AP-42 emission factor of 1.9 lb/mmcf of fuel gas burned times the total fuel gas burned per month times the fuel gas heating value correction factor divided by 2000 pounds per ton. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1000 Btu/scf. Add this total to the total for the previous 11 calendar months to obtain the rolling 12-month total emissions. Annual allowable emissions are based on operation at maximum capacity for 8760 hours per year. Compliance with the hourly particulate emission limit constitutes compliance with the annual particulate emission limit.

i. Emission Limitation:

24.15 pounds per hour $NO_x$

Applicable Compliance Method:

Multiply the BP $NO_x$ emission factor of 0.065 lb/mmBtu by the hourly fuel gas burned to determine the hourly $NO_x$ emissions. The $NO_x$ emission factor was

developed through testing on this emissions unit using Method 7E of 40 CFR Part 60, Appendix A on August 17, 1999. If required, the permittee shall demonstrate compliance using Methods 1 through 4 and 7E of 40 CFR part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

j. Emission Limitation:

70.52 tons $NO_x$ per rolling, 12-month period

Applicable Compliance Method:

Multiply the BP $NO_x$ emission factor of 0.065 lb/mmBtu by the monthly total fuel gas burned divided by 2000 pounds per ton to determine the total monthly $NO_x$ emissions. Add this total to the total for the previous 11 calendar months to obtain the rolling 12-month total emissions. Annual allowable emissions are based on operation at maximum capacity for 8760 hours per year. Compliance with the hourly $NO_x$ limit constitutes compliance with the annual $NO_x$ limit.

k. Emission Limitation:

0.59 pound per hour VOC

Applicable Compliance Method:

Multiply the AP-42 emission factor of 1.7 lb/mmcf of fuel gas burned corrected for heating value by the hourly fuel gas burned. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1000 Btu/scf. If required, the permittee shall demonstrate compliance using Methods 1 through 4 and 25 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

l. Emission Limitation:

1.71 tons per rolling, 12-month period VOC

Applicable Compliance Method:

Multiply the AP-42 emission factor of 1.7 lb/mmcf of fuel gas burned corrected for heating value by the monthly amount of fuel gas burned divided by 2000 pounds per ton. The heating value correction factor is equal to the ratio of the actual fuel gas heat content to the AP-42 heat content of 1000 Btu/scf. Add this total to the total for the previous 11 calendar months to obtain the rolling 12-month total emissions. Annual allowable emissions are based upon operation at maximum capacity for 8760 hours per year. Compliance with the hourly VOC emissions limit constitutes compliance with the annual limit.

2. Emission testing requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for $NO_X$.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Methods 1 through 4 and 7E of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Toledo Division of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Toledo Division of Environmental Services's refusal to accept the results of the emission test(s).

Personnel from the Toledo Division of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Toledo Division of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Toledo Division of Environmental Services.

## VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| F001 - paved roadways and parking areas (see Section A.I.2.a) | OAC rule 3745-17-07(B)(4) | no visible particulate emissions except for 6 minutes during any 60-minute period |
| | OAC rule 3745-17-08(B), (B)(8), (B)(9) | reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.I.2.c, A.I.2.d, and A.I.2.f through A.I.2.j) |
| unpaved roadways and parking areas (see Section A.I.2.b) | OAC rule 3745-17-07(B)(5) | no visible particulate emissions except for 13 minutes during any 60-minute period |
| | OAC rule 3745-17-08(B), (B)(2) | reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.I.2.e through A.I.2.j) |

**2. Additional Terms and Conditions**

2.a The paved roadways and parking areas that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

paved roadways:

PR-1

paved parking areas:

PP-1

2.b The unpaved roadways and parking areas that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

unpaved roadways:

UR-1

unpaved parking areas:

UP-1

2.c The permittee shall employ reasonably available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved roadways and parking areas by sweeping and watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.d The permittee shall employ reasonably available control measures on the unpaved shoulders of all paved roadways for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to pave the unpaved shoulders of all paved roadways at sufficient frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.e The permittee shall employ reasonably available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to paving all unpaved roadways and parking areas at sufficient frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.f The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved or unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.

2.g Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled with the control measure(s) specified above for paved surfaces. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to the visible emission limitation for paved roadways and parking areas.

2.h The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.

2.i Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.

2.j Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

## II. Operational Restrictions

None

## III. Monitoring and/or Recordkeeping Requirements

1. Except as otherwise provided in this section, the permittee shall perform inspections of the roadways and parking areas in accordance with the following frequencies:

| paved roadways and parking areas | minimum inspection frequency |
|---|---|
| PR-1, PP-1 | daily |

| unpaved roadways and parking areas | minimum inspection frequency |
|---|---|
| UR-1, UP-1 | daily |

2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

3. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

4. The permittee shall maintain records of the following information:

   a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;

   b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;

   c. the dates the control measures were implemented; and

   d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

   The information required in section A.III.4.d shall be kept separately for (i) the paved roadways and parking areas and (ii) the unpaved roadways and parking areas, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

## IV. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:

   a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and

   b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

## V. Testing Requirements

1. Compliance with the emission limitation for the paved and unpaved roadways and parking areas identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources," as such Appendix existed on July 1, 1996,

and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| F004 - Coke crusher | OAC rule 3745-17-07(B)(1) | 20% opacity as a 3-minute average |
| | OAC rule 3745-17-08(B) | reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.I.b through A.I.2.d |

**2. Additional Terms and Conditions**

2.a The material handling operation(s) that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

Coke crushing

2.b The permittee shall employ reasonably available control measures for the above-identified material handling operation(s) for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to perform the following control measure(s) to ensure compliance:

| material handling operation(s) | control measure(s) |
|---|---|
| Coke crushing | watering |

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.c For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control

measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

2.d Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

## II. Operational Restrictions

None

## III. Monitoring and/or Recordkeeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

| material handling operation(s) | minimum inspection frequency |
|---|---|
| Coke crushing | weekly |

2. The above-mentioned inspections shall be performed during representative, normal operating conditions.

3. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

4. The permittee shall maintain records of the following information:

   a. the date and reason any required inspection was not performed;

   b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s):

   c. the dates the control measure(s) was (were) implemented; and

   d. on a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.

   The information in section A.III.4.d shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

## IV. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:

   a. each day during which an inspection was not performed by the required frequency; and

   b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.

2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

## V. Testing Requirements

1. Compliance with the visible emission limitation for the material handling operation(s) identified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| F005 - Coke handling | OAC rule 3745-31-05(A)(3) (PTI 04-1046 as modified on August 5, 1998) | 5.02 tons per year particulate emissions as a rolling, 12-month summation<br><br>best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see sections A.I.2.b through A.I.2.d)<br><br>The permittee shall maintain a partial enclosure on the coke pit.<br><br>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(B)(1) and 3745-17-08(B). |
| | OAC rule 3745-17-07(B)(1) | Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average. |
| | OAC rule 3745-17-08(B) | See sections A.I.2.a through A.I.2.d. |

**2. Additional Terms and Conditions**

2.a The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

Coke pit, front-end loader

2.b The permittee shall employ best available control measures for the above-identified material handling operation(s) for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit

application, the permittee has committed to perform the following control measure(s) to ensure compliance:

| material handling operation(s) | control measure(s) |
|---|---|
| Coke pit, front-end loader | watering |

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.c For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

2.d Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rules 3745-17-08 and 3745-31-05.

## II. Operational Restrictions

None

## III. Monitoring and/or Recordkeeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

| material handling operation(s) | minimum inspection frequency |
|---|---|
| Coke crushing | weekly |

2. The above-mentioned inspections shall be performed during representative, normal operating conditions.

3. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

4. The permittee shall maintain records of the following information:

   a. the date and reason any required inspection was not performed;

b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s):

c. the dates the control measure(s) was (were) implemented; and

d. on a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.

The information in section A.III.4.d shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

5. The permittee shall maintain monthly records of the amount of coke handled. From this data, the permittee shall calculate and record the total particulate emissions for that month and the rolling, 12-month summation of the monthly emissions in accordance with the procedures specified in section V.

## IV. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:

a. each day during which an inspection was not performed by the required frequency; and

b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.

c. each month that the rolling, 12-month summation of total particulate emissions recorded under A.III.5 is in excess of the limit established under section A.I.1.

2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

## V. Testing Requirements

1. Compliance with the emissions limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

20% opacity as a 3-minute average for fugitive emissions

Applicable Compliance Method:

Compliance with the visible emission limitation for the material handling operation(s) identified above shall be determined in accordance with Test

Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

b. Emission Limitation:

5.02 tons per year particulate emissions as a rolling, 12-month summation

Applicable Compliance Method:

AP-42 calculation using sections 13.2.4 and 13.2.5 dated January, 1995 and the monitoring and record keeping requirements of section A.III.5. Add the monthly total emissions to the total emissions for the previous 11 months to determine the rolling, 12-month summation of particulate emissions.

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| F006 - Coke Crusher #2 | OAC rule 3745-31-05(A)(3) (PTI 04-1046 as modified on August 5, 1998) | 1.86 tons per year particulate emissions as a rolling, 12-month summation<br><br>The permittee shall maintain a partial enclosure on this emissions unit.<br><br>See section A.I.2.e. |
| | OAC rule 3745-17-07(B)(1) | Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average. |
| | OAC rule 3745-17-08(B) | See sections A.I.2.b through A.I.2.d. |

**2. Additional Terms and Conditions**

2.a The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

Coke crushing

2.b The permittee shall employ reasonably available control measures for the above-identified material handling operation(s) for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to perform the following control measure(s) to ensure compliance:

| material handling operation(s) | control measure(s) |
|---|---|
| Coke crushing | Maintaining sufficient moisture content in coke |

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.c For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

2.d Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

2.e The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(B)(1) and OAC rule 3745-17-08(B).

## II. Operational Restrictions

None

## III. Monitoring and/or Recordkeeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

| material handling operation(s) | minimum inspection frequency |
|---|---|
| Coke crushing | weekly |

2. The above-mentioned inspections shall be performed during representative, normal operating conditions.

3. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

4. The permittee shall maintain records of the following information:

   a. the date and reason any required inspection was not performed;

   b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s):

c. the dates the control measure(s) was (were) implemented; and

d. on a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.

The information in section A.III.4.d shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

5. The permittee shall maintain monthly records of the amount of coke crushed. From this data, the permittee shall calculate and record the total particulate emissions for that month and the rolling, 12-month summation of the monthly emissions in accordance with the procedures specified in section V.

## IV. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:

a. each day during which an inspection was not performed by the required frequency; and

b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.

c. each month that the rolling, 12-month summation of particulate emissions recorded under A.III.5 is in excess of the limits established under section A.I.1.

2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

## V. Testing Requirements

1. Compliance with the emissions limitation(s) in Section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

20% opacity as a 3-minute average for fugitive emissions

Applicable Compliance Method:

Compliance with the visible emission limitation for the material handling operation(s) identified above shall be determined in accordance with Test Method 9 as set forth in “Appendix on Test Methods” in 40 CFR, Part 60 (“Standards of Performance for New Stationary Sources”), as such Appendix

existed on July 1, 2002, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

b. Emission Limitation:

1.86 tons per year particulate emissions as a rolling, 12-month summation

Applicable Compliance Method:

Emission calculation using the emission factor of 0.02 pound particulate emissions per ton of coke crushed from the Ohio EPA document *Reasonably Available Control MEasures for Fugitive Dust Sources* Table 2.19-2 dated August, 1983 and the monitoring and record keeping requirements of A.III.5. Add the monthly total emissions to the total emissions for the previous 11 months to determine the rolling, 12-month summation of particulate emissions.

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **J001**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| J001 - 20,000 gallon per day railcar loading rack for aviation gasoline at a bulk terminal. | 40 CFR Part 63, Subpart R | See section A.I.2.a. |
| | OAC rule 3745-21-09(Q) | See section A.I.2.a. |
| | OAC rule 3745-31-05(A)(3) (PTI 04-401) | 6.60 tons of volatile organic compounds (VOC) per year<br><br>See section A.II. |
| | OAC rule 3745-21-09(T) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC 40 CFR 63.648 | See sections A.I.2.c and A.I.2.d. |

**2. Additional Terms and Conditions**

2.a In accordance with 40 CFR Part 63, Subpart R and OAC rule 3745-21-09(Q), this emissions unit is exempt from the requirements of these regulations because the throughput capacity is equal to, or less than, 20,000 gallons (75,700 liters) per day.

2.b Refer to Part II of this permit for the state requirements for equipment leaks found in sections A.I.2, A.II, A.III, A.IV, and A.V, referencing OAC rule 3745-21-09(T).

2.c Table 6 of 40 CFR Part 63, Subpart CC specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.d Refer to Part II of this permit for the applicable equipment leak provisions found in sections A.I.2, A.II, A.III, A.IV and A.V, referencing 40 CFR Part 60, Subpart VV.

## II. Operational Restrictions

1. The maximum throughput of gasoline for this emissions unit shall not exceed 20,000 gallons (75, 700 liters) per day.

2. The gasoline supplied to this emissions unit shall come only from stationary storage tanks equipped with internal or external floating roofs.

## III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain daily records of the following information:

   a. the types of petroleum liquids loaded in this emissions unit;

   b. the gasoline throughput; and

   c. the maximum pressure (in pounds per square inch absolute) and the molecular weight of vapors of each liquid loaded in this emissions unit.

2. The permittee shall maintian a record of the annual throughput of all petroleum liquids loaded in this emissions unit.

## IV. Reporting Requirements

1. If the daily records document a daily throughput greater than 20,000 gallons of gasoline, the permittee shall so notify the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

2. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

## V. Testing Requirements

1. Compliance with the emission limitation and operational restriction of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

      6.60 tons of VOC per year

      Applicable Compliance Method:

      Compliance shall be demonstrated through the monitoring and record keeping requirements of section A.III using formula (1) of the 1/95 AP-42 Section 5.2:

      L = [12.46 * S * P * M] / T for each liquid loaded

where:

L = the loading loss in pounds of VOC per thousand gallons loaded;
S = saturation factor (0.60 for submerged loading);
P = true vapor pressure of the liquid loaded (in psia);
M = molecular weight of vapors (in lb/lb-mole); and
T = temperature of bulk liquid loaded (520▾R may be assumed as a year round average).

When more than one type of petroleum liquid is loaded, the loading loss from each type of liquid shall be calculated. The total loading loss shall be the sum of the loading losses for each type of liquid loaded.

Alternative U.S. EPA-approved methods may be used with prior approval from the Ohio EPA.

b. Operational Restriction:

The maximum throughput of gasoline for this emissions unit shall not exceed 20,000 gallons (75, 700 liters) per day.

Applicable Compliance Method:

Compliance with the throughput limitation in section A.II.1 shall be determined in accordance with the monitoring and record keeping requirements specified in section A.III.1.

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| J004 - Marine vessel loading operation. | 40 CFR Part 63, Subpart Y | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |
| | OAC rule 3745-21-09(T) | See section A.I.2.c. |

**2. Additional Terms and Conditions**

2.a This emissions unit is exempt from the requirements of 40 CFR Part 63, Subpart CC, in accordance with 40 CFR 63.640(c)(6), because the emissions unit does not meet the applicability criteria of 40 CFR Part 63, Subpart Y.

2.b In accordance with 40 CFR Part 63, Subpart Y, this emissions unit is exempt from the requirements of this regulation, because the potential to emit of each individual hazardous air pollutant (HAP) is less than 10 tons per year, and the potential to emit of all HAPs combined is less than 25 tons per year.

2.c Refer to Part II of this permit for the state requirements for equipment leaks found in sections A.I.2, A.II, A.III, A.IV, and A.V, referencing OAC rule 3745-21-09(T).

#### II. Operational Restrictions

1. The potential to emit of each individual HAP for this emissions unit shall be less than 10 tons per year (9.1 Mg) and shall be calculated annually.

2. The potential to emit of all HAPs combined for this emissions unit shall be less than 25 tons per year (22.7 Mg) and shall be calculated annually.

## III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall retain records of the potential to emit estimates determined in 40 CFR 63.565(l), i.e., emission estimation procedures and records of their actual throughputs by commodity for 5 years.

## IV. Reporting Requirements

1. If the annual records indicate that potential HAP emissions are equal to or greater than the emission limitation(s), the permittee shall notify the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

1. Compliance with the estimate of potential HAP emissions limitation(s) in sections A.II.1 and A.II.2 shall be determined in accordance with the monitoring and record keeping requirements of section A.III.1 from any loading operations of commodities with vapor pressures greater than, or equal to, 10.3 kilopascals (1.5 psia) at standard conditions, 20 degrees Celsius and 760 millimeters of mercury. Emission estimates and emission factors shall be based on test data, or if test data is not available, shall be based on measurements or estimating techniques generally accepted in industry practice for operating conditions at the source.

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

### 2. Additional Terms and Conditions

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

Emissions Unit ID: **J005**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| J005 - Asphalt loading rack | OAC rule 3745-21-09(T) | See section A.I.2.a. |
| | OAC rule 3745-31-05(A)(3) (PTI 04-1044) | 0.123 lb of volatile organic compounds (VOC) per 1000 gallons loaded |
| | OAC rule 3745-31-05(D) (PTI 04-1044) | 3.2 tons/year of VOC per rolling, 12-month period |
| | 40 CFR Part 60, Subpart GGG | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.c. |

**2. Additional Terms and Conditions**

2.a Refer to Part II of this permit for the state requirements for equipment leaks found in sections A.I.2, A.II, A.III, A.IV, and A.V, referencing OAC rule 3745-21-09(T).

2.b Refer to Part II of this permit for the applicable equipment leak provisions found in sections A.I.2, A.II, A.III, A.IV, and A.V.

2.c The fluids used in this process contain less than 5% total organic HAP's and are not subject to the equipment leaks standards of 40 CFR 63.648.

#### II. Operational Restrictions

1. The maximum annual throughput for the asphalt loading rack J005 shall not exceed 51,240,000 gallons, based upon a rolling, 12 month summation of the gallons of the asphalt loaded.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:

   a. the loading rate for each month; and

   b. the rolling, 12-month summation of the loading rates.

## IV. Reporting Requirements

1. The permittee shall submit semi-annual deviation (excursion) reports that identify all exceedances of the rolling, 12-month loading rate limitation.

## V. Testing Requirements

1. Compliance with the emission limitation specified in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

0.123 pound of VOC per thousand gallons of asphalt loaded

Applicable Compliance Method:

Calculate the loading loss by use of the following equation from AP-42 5th Edition, January, 1995, Chapter 5.2

L = [12.46 * S * P * M] / T

where:

L = the loading loss in pounds of VOC per thousand gallons loaded;
S = saturation factor = 1.45 for splash loading tank trucks;
P = true vapor pressure of liquid loaded (psia) = 0.028 (for asphalt at 320 degrees F);
M = molecular weight of vapors (lb/lbmole) = 190 (assuming residual no. 6 oil); and
T = temperature of bulk liquid loaded, degrees R = 780.

b. Emission Limitation:

3.2 tons/year of VOC per rolling, 12-month period

Applicable Compliance Method:

Multiply the VOC loading loss emission factor of 0.123 lb/1000 gallons of asphalt loaded by the actual asphalt loading rate per rolling, 12-month period**.** The emission

factor was obtained by the following equation from AP-42 5th Edition, January, 1995, Chapter 5.2

L = [12.46 * S * P * M] / T

where:

L = the loading loss in pounds of VOC per thousand gallons loaded;
S = saturation factor = 1.45 for splash loading tank trucks;
P = true vapor pressure of liquid loaded (psia) = 0.028 (for asphalt at 320 degrees F);
M = molecular weight of vapors (lb/lbmole) = 190 (assuming residual no. 6 oil); and
T = temperature of bulk liquid loaded, degrees R = 780.

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Fluidized Catalytic Cracking Unit (FCCU) consisting of an FCC Reactor, catalyst regenerator, fractionator, strippers and absorbers with an average processing capacity of 55,000 barrels per day of fresh feed; and a carbon monoxide (CO) Boiler with a maximum input capacity of 669 million Btu per hour | OAC rule 3745-31-02(A)(2) (PTI 04-01290) | See sections A.I.2.c through A.I.2.f. |
| | OAC rule 3745-17-07(A) | Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule. |
| | OAC rule 3745-17-10(B)(1) | 0.020 pound of particulate emissions per million Btu of actual heat input from fuel burned in the CO boiler |
| | OAC rule 3745-17-11(A) | 91.7 pounds per hour particulate emissions<br><br>See section A.I.2.b. |
| | OAC rule 3745-18-54(W)(6) | 0.92 pound of sulfur dioxide ($SO_2$) per one thousand pounds of fresh feed<br><br>See section A.I.2.b. |
| | OAC rule 3745-21-09(T) | See section A.I.2.a. |
| equipment leaks | 40 CFR Part 63, Subpart CC<br>40 CFR 63.648 | See section A.I.2.a. |
| | 40 CFR Part 63 , Subpart UUU<br>40 CFR 63.1563(b) | See section A.I.2.g. |
| catalytic cracking unit | 40 CFR 63.1563(e) | See section A.I.2.h. |

| | | |
|---|---|---|
| | 40 CFR 63.1564(a) | See section A.I.2.i. |
| | 40 CFR 63.1565(a) | See section A.I.2.j. |
| | 40 CFR 63.1577 | See section A.I.2.k. |
| bypass lines | 40 CFR 63.1569(a) | See sections A.I.2.l and A.I.2.m. |

**2. Additional Terms and Conditions**

2.a The permittee shall comply with all applicable equipment leak terms and conditions found in sections A.I.2, A.II, A.III, A.IV, and A.V referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T) in Part II - Specific Facility Terms and Conditions of this permit.

2.b This emission limit applies to emissions from the FCCU.

2.c The permittee shall limit CO emissions from the FCCU to 500 parts per million by volume dry basis (ppmvd) as a 1-hour average. The CO limit shall not apply during periods of startup, shutdown or malfunction of the FCCU or the CO control equipment, if any, provided that during startup, shutdown or malfunction BP shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the USEPA and the Toledo Division of Environmental Services which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the emissions unit.

2.d The permittee shall reduce total particulate emissions at the FCCU to 1 pound per 1,000 pounds of coke burned. The permittee shall achieve these reductions through installation of an electrostatic precipitator. The permittee shall meet this limit by no later than 6 months after the planned 2007 shutdown.

2.e The permittee shall not burn in the CO Boiler any refinery fuel gas that has a volume-weighted, rolling, 3-hour average hydrogen sulfide ($H_2S$) concentration greater than 0.10 grain per dry standard cubic foot, except during periods of startup, shutdown or malfunction of the refinery fuel gas amine systems provided that BP shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.

2.f By no later than September 30, 2003, the CO Boiler (not the FCCU) shall be considered an affected facility for purposes of 40 CFR Part 60, Subpart J, and shall comply with all requirements of 40 CFR Part 60, Subparts A and J as those subparts apply to fuel gas combustion devices. These requirements apply to the CO Boiler at all times when burning refinery fuel gas.

2.g The permittee shall comply with the emission limitations and work practice standards for existing sources in 40 CFR Part 63, Subpart UUU by no later than April 11, 2005 unless an extension of compliance is granted under 40 CFR 63.1563(c).

2.h The permittee shall meet the notification requirements in 40 CFR 63.1574 [See section A.IV.] according to the schedule in 40 CFR 63.1574 and in 40 CFR Part 63 , Subpart A. Some of the notifications shall be submitted before the date the permittee is required to comply with the emission limitations and work practice standards in Subpart UUU.

2.i METAL HAP EMISSIONS
The permittee shall meet each emission limitation in Table 1 [See section A.VI.] of 40 CFR Part 63, Subpart UUU that applies to this emissions unit. The permittee can choose from the four following options:

i. [63.1564(a)(1)(i)]
the permittee can elect to comply with the NSPS requirements (Option 1);

ii. [63.1564(a)(1)(ii)]
the permittee can elect to comply with the PM emission limit (Option 2);

iii. [63.1564(a)(1)(iii)]
the permittee can elect to comply with the Nickel (Ni) lb/hr emission limit (Option 3); or

iv. [63.1564(a)(1)(iv)]
the permittee can elect to comply with the Ni lb/1,000 lbs of coke burn-off emission limit (Option 4).

2.j ORGANIC HAP EMISSIONS
The permittee shall meet each emission limitation in Table 8 [See section A.VI.] that applies to this emissions unit for organic HAP emissions. The permittee can choose from the following two options:

i. [63.1565(a)(1)(i)]
the permittee can elect to comply with the NSPS requirements (Option 1); or

ii. [63.1565(a)(1)(ii)]
the permittee can elect to comply with the CO emission limit (Option 2).

2.k Table 44 [See section A.VI.] shows which parts of the General Provisions in 40 CFR 63.1 through 63.15 apply to this emissions unit.

2.l HAP EMISSIONS FROM BYPASS LINES
The permittee shall meet each work practice standard in Table 36 [See section A.VI.] that applies to this emissions unit. The permittee can choose from the four following options:

i. [63.1569(a)(1)(i)]
the permittee can elect to install an automated system (Option 1);

ii. [63.1569(a)(1)(ii)]
the permittee can elect to use a manual lock system (Option 2);

iii. [63.1569(a)(1)(iii)]
the permittee can elect to seal the line (Option 3); or

iv. [63.1569(a)(1)(iv)]
the permittee can elect to vent to a control device (Option 4).

2.m [63.1569(a)(2)]
As provided in 40 CFR 63.6(g), the EPA, may choose to grant the permittee permission to use an alternative to the work practice standard in 40 CFR 63.1569(a)(1) [See section A.I.2.].

## II. Operational Restrictions

1. The permittee shall only burn natural gas and/or refinery fuel gas in the CO Boiler.

2. See the applicable sections in Part II for equipment leaks in section A.II, referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

3. [40 CFR Part 63, Subpart UUU]
The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward.

a. [63.1564(a)(2)] OPERATING LIMITS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS

i. The permittee shall comply with each operating limit in Table 2 [See section A.VI.] that applies to this emissions unit.

ii. [63.1564(a)(4)]
The emission limitations and operating limits for metal HAP emissions from catalytic cracking units required in 40 CFR 63.1564(a)(1) and (2) [See sections A.I.2. and A.II.] do not apply during periods of planned maintenance preapproved by the applicable permitting authority according to the requirements in 40 CFR 63.1575(j) [See section A.IV.].

b. [63.1565(a)(2)] OPERATING LIMITS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC CRACKING UNITS (CCU)

The permittee shall comply with each site-specific operating limit in Table 9 [See section A.VI.] that applies to this emissions unit.

## III. Monitoring and/or Record Keeping Requirements

1. Continuous Opacity Monitoring Requirements

   a. The permittee shall operate and maintain existing equipment to continuously monitor and record the opacity of particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 51, Appendix P.

   b. The permittee shall maintain records of all data obtained by the continuous opacity monitoring system including, but not limited to, percent opacity on an instantaneous (1-minute) and 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

   c. Continuous Opacity Monitoring - Certified Systems Statement of Certification

      A statement of certification of the existing continuous Opacity monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. Proof of certification shall be made available to the Toledo Division of Environmental Services upon request.

2. Continuous $SO_2$ Emissions Monitoring Requirements

   The permittee shall operate and maintain existing equipment to continuously monitor and record $SO_2$ emissions from the FCCU in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

3. Continuous $H_2S$ Monitoring and Record Keeping Requirements

   a. The permittee shall calibrate, maintain and operate a continuous monitoring system for measurement of the $H_2S$ content in the fuel gas before being burned in the CO Boiler. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

      i. The $H_2S$ monitoring device shall continuously monitor and record the concentration (dry basis) of $H_2S$ in fuel gases before being burned in any fuel gas combustion device.

      ii. The span value for this instrument is 425 mg/dscm $H_2S$.

      iii. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of $H_2S$ in the fuel gas being burned.

iv. The performance evaluations for this $H_2S$ monitor shall use Performance Specification 7. Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.

4. Common Monitoring and Record Keeping Requirements for $SO_2$ and $H_2S$ continuous emissions monitoring systems

a. The permittee shall automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts of the $H_2S$ monitor at least once daily in accordance with a written procedure. The zero and span shall, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in Appendix B of 40 CFR Part 60. The system shall allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

b. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) shall be programmed to record the unadjusted concentration measured in the calibration drift (CD) prior to resetting the calibration, if performed, or record the amount of adjustment.

c. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in Appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

d. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15- minute period.

e. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

f. The permittee shall implement a quality control program for the $H_2S$ and $SO_2$ continuous emissions monitoring systems. As a minimum, each quality control program shall

include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

i. calibration of CEMS;
ii. CD determination and adjustment of CEMS;
iii. preventive maintenance of CEMS (including spare parts inventory);
iv. data recording, calculations, and reporting;
v. accuracy audit procedures including sampling and analysis methods; and
vi. program of corrective action for malfunctioning CEMS.

As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the permittee shall revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

g. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

5. FCC/CO Boiler Monitoring and Record Keeping Requirements

a. For each day during which the permittee burns a fuel other than refinery fuel gas or natural gas in the CO Boiler, the permittee shall maintain a record of the type and quantity of fuel burned.

b. The permittee shall measure and record hourly average CO concentrations from the FCCU. Process analyzers calibrated in accordance with manufacturer's recommendations may be used for this purpose.

c. The permittee shall maintain a record of the operating time of the FCCU, the CO Boiler, and a record of all periods when the emissions from the FCCU bypass the CO Boiler.

d. See the applicable sections in Part II for equipment leaks in A.III., referencing 40 CFR Part 60, Subpart VV. and OAC rule 3745-21-09(T).

6. Except as otherwise specified in this section, all records required under Section A.III of this permit shall be maintained in accordance with the Monitoring and Related Record Keeping Requirements of Part I - General Terms and Conditions.

7. [40 CFR Part 63, Subpart UUU]
The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 onward.

a. [63.1564(a)(3)] REQUIREMENTS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS

The permittee shall prepare an operation, maintenance, and monitoring plan according to the requirements in 40 CFR 63.1574(f) [See section A.IV.] and operate at all times according to the procedures in the plan.

b. [63.1565(a)(3)] WORK PRACTICE STANDARDS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC CRACKING UNITS (CCU) - 40 CFR Part 63, Subpart UUU

The permittee shall prepare an operation, maintenance, and monitoring plan according to the requirements in 40 CFR 63.1574(f) [See section A.IV.] and operate at all times according to the procedures in the plan.

c. [63.1569(a)(3)] WORK PRACTICE STANDARDS FOR HAP EMISSIONS FOR BYPASS LINES - 40 CFR Part 63, Subpart UUU
The permittee shall prepare an operation, maintenance, and monitoring plan according to the requirements in 40 CFR 63.1574(f) [See section A.IV.] and operate at all times according to the procedures in the plan.

d. [63.1570] GENERAL COMPLIANCE REQUIREMENTS - 40 CFR Part 63, Subpart UUU

i. [63.1570(a)]
The permittee shall be in compliance with all of the non-opacity standards in this subpart during the times specified in 40 CFR 63.6(f)(1).

ii. [63.1570(b)]
The permittee shall be in compliance with the opacity and visible emission limits in this subpart during the times specified in 40 CFR 63.6(h)(1).

iii. [63.1570(c)]
The permittee shall always operate and maintain the affected source, including air pollution control and monitoring equipment, according to the provisions in 40 CFR 63.6(e)(1)(i). During the period between April 11, 2005 and the date upon which continuous monitoring systems have been installed and validated and any applicable operating limits have been set, the permittee shall maintain a log detailing the operation and maintenance of the process and emissions control equipment.

iv. [63.1570(d)]
The permittee shall develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in 40 CFR 63.6(e)(3).

v. [63.1570(e)]
During periods of startup, shutdown, and malfunction, the permittee shall operate in accordance with the SSMP.

vi. [63.1570(f)]
The permittee shall report each instance in which each emission limitation that was not met and each applicable operating limit in 40 CFR Part 63, Subpart UUU that was not met. This includes periods of startup, shutdown, and malfunction. The permittee also shall report each instance in which the applicable work practice standards in 40 CFR Part 63, Subpart UUU that were not met. These instances are deviations from the emission limitations and work practice standards in this subpart. These deviations shall be reported according to the requirements in 40 CFR 63.1575 [See section A.IV.].

vii. [63.1570(g)]
Consistent with 40 CFR 63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if the permittee demonstrates to the Administrator's satisfaction that the permittee was operating in accordance with the SSMP. The SSMP shall require that good air pollution control practices are used during those periods. The plan shall also include elements designed to minimize the frequency of such periods (i.e., root cause analysis). The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in 40 CFR 63.6(e) and the contents of the SSMP.

e. [63.1572] MONITORING, INSTALLATION, OPERATION, AND MAINTENANCE REQUIREMENTS [Tables 40 and 41] - 40 CFR Part 63, Subpart UUU

i. [63.1572(a)]
The permittee shall install, operate, and maintain each continuous emission monitoring system according to the requirements in 40 CFR 63.1572(a)(1) through (4) below.

(a) [63.1572(a)(1)]
The permittee shall install, operate, and maintain each continuous emission monitoring system according to the requirements in Table 40 [See section A.VI.].

(b) [63.1572(a)(2)]
If the permittee uses a continuous emission monitoring system to meet the NSPS CO or $_{SO2}$ limit, the permittee shall conduct a performance evaluation of each continuous emission monitoring system according to the requirements in 40 CFR 63.8 and Table 40 of 40 CFR Part 63, Subpart UUU. This requirement does not apply to an affected source subject to the NSPS that has already demonstrated initial compliance with the applicable performance specification.

(c) [63.1572(a)(3)]
As specified in 40 CFR 63.8(c)(4)(ii), each continuous emission monitoring system shall complete a minimum of one cycle of operation

(sampling, analyzing, and data recording) for each successive 15-minute period.

(d) [63.1572(a)(4)]
Data shall be reduced as specified in 40 CFR 63.8(g)(2).

ii. [63.1572(b)]
The permittee shall install, operate, and maintain each continuous opacity monitoring system according to the requirements in 63.1572(b)(1) through (3) below.

(a) [63.1572(b)(1)]
Each continuous opacity monitoring system shall be installed, operated, and maintained according to the requirements in Table 40 [See section A.VI.].

(b) [63.1572(b)(2)]
If the permittee uses a continuous opacity monitoring system to meet the NSPS opacity limit, the permittee shall conduct a performance evaluation of each continuous opacity monitoring system according to the requirements in 40 CFR 63.8 and Table 40 [See section A.VI.]. This requirement does not apply to an affected source subject to the NSPS that has already demonstrated initial compliance with the applicable performance specification.

(c) [63.1572(b)(3)]
As specified in 40 CFR 63.8(c)(4)(i), each continuous opacity monitoring system shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

iii. [63.1572(c)]
The permittee shall install, operate, and maintain each continuous parameter monitoring system according to the following paragraphs of this section.

(a) [63.1572(c)(1)]
Each continuous parameter monitoring system shall be installed, operated, and maintained according to the requirements in Table 41 [See section A.VI.] and in a manner consistent with the manufacturer's specifications or other written procedures that provide adequate assurance that the equipment will monitor accurately.

(b) [63.1572(c)(2)]
The continuous parameter monitoring system shall complete a minimum of one cycle of operation for each successive 15-minute period. The permittee shall have a minimum of four successive cycles of operation to have a valid hour of data (or at least two if a calibration check is

performed during that hour or if the continuous parameter monitoring system is out-of-control).

(c) [63.1572(c)(3)]
Each continuous parameter monitoring system shall have valid hourly average data from at least 75 percent of the hours during which the process operated.

(d) [63.1572(c)(4)]
Each continuous parameter monitoring system shall determine and record the hourly average of all recorded readings and if applicable, the daily average of all recorded readings for each operating day. The daily average shall cover a 24-hour period if operation is continuous or the number of hours of operation per day if operation is not continuous.

(e) [63.1572(c)(5)]
Each continuous parameter monitoring system shall record the results of each inspection, calibration, and validation check.

iv. [63.1572(d)]
The permittee shall monitor and collect data according to the requirements in 40 CFR 63.1572(d)(1) and (d)(2) [below].

(a) [63.1572(d)(1)]
Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or collect data at all required intervals) at all times the affected unit is operating.

(b) [63.1572(d)(2)]
The permittee may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities for purposes of this regulation, including data averages and calculations, for fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system.

f. [63.1573] MONITORING ALTERNATIVES - 40 CFR Part 63, Subpart UUU

i. [63.1573(a)] APPROVED ALTERNATIVE FOR MONITORING GAS FLOW RATE
The permittee can elect to use this alternative to a continuous parameter monitoring system for the catalytic regenerator exhaust gas flow rate for the catalytic cracking unit if the unit does not introduce any other gas streams into the catalyst regeneration vent (i.e., complete combustion units with no additional

combustion devices). If this alternative is selected, the permittee shall use the same procedure for the performance test and for monitoring after the performance test.

(a) [63.1573(a)(1)]
Install and operate a continuous parameter monitoring system to measure and record the hourly average volumetric air flow rate to the catalytic cracking unit regenerator. Or, determine and record the hourly average volumetric air flow rate to the catalytic cracking unit regenerator using the catalytic cracking unit control room instrumentation.

(b) [63.1573(a)(2)]
Install and operate a continuous parameter monitoring system to measure and record the temperature of the gases entering the control device (or exiting the catalyst regenerator if the permittee does not use an add-on control device).

(c) [63.1573(a)(3)]
Calculate and record the hourly average actual exhaust gas flow rate using Equation 1 of this section as follows:

*(Eq. 1)*

$$Q_{gas} = 1.12 \times (Q_{air} + Q_{oxy}) \times \frac{Temp_{gas}}{528}$$

Where:

$Q_{gas}$ = Hourly average actual gas flow rate, acfm;
1.12 = Default correction factor to convert gas flow from dry standard cubic feet per minute (dscfm) to standard cubic feet per minute (scfm);

$Q_{air}$ = Volumetric flow rate of air to regenerator, as determined from the catalytic cracking unit control room instrumentations, dscfm;

$Q_{oxy}$ = Volumetric flow rate of oxygen-enriched air stream to regenerator, as determined from the catalytic cracking unit control room instrumentations, dscfm;

$Temp_{gas}$ = Temperature of gas stream in vent measured as near as practical to the control device or opacity monitor, °K. For wet scrubbers, temperature of gas prior to the wet scrubber; and

$P_{vent}$ = Absolute pressure in the vent measured as near as practical to the control device or opacity monitor, atm. When used in conjunction with opacity in the final vent stack, you can assume $P_{vent}$ = 1 atm.

ii. [63.1573(c)] USING ANOTHER TYPE OF MONITORING SYSTEM
The permittee may request approval from the Director to use an automated data compression system. An automated data compression system does not record monitored operating parameter values at a set frequency (e.g., once every hour) but records all values that meet set criteria for variation from previously recorded values. The permittee's request shall contain a description of the monitoring system and data recording system, including the criteria used to determine which monitored values are recorded and retained, the method for calculating daily averages, and a demonstration that the system meets all of the criteria in 63.1573(c)(1) through (5) below:

(a) [63.1573(c)(1)]
the system measures the operating parameter value at least once every hour;

(b) [63.1573(c)(2)]
the system records at least 24 values each day during periods of operation;

(c) [63.1573(c)(3)]
the system records the date and time when monitors are turned off or on;

(d) [63.1573(c)(4)]
the system recognizes unchanging data that may indicate the monitor is not functioning properly, alerts the operator, and records the incident; and

(e) [63.1573(c)(5)]
the system computes daily average values of the monitored operating parameter based on recorded data.

iii. [63.1573(d)] REQUESTING MONITORING ALTERNATIVES
The permittee may request approval to monitor parameters other than those required in 40 CFR Part 63, Subpart UUU. The permittee shall request approval if:

(a) [63.1573(d)(1)]
the permittee uses a control device other than a thermal incinerator, boiler, process heater, flare, electrostatic precipitator, or wet scrubber;

(b) [63.1573(d)(2)]
the permittee uses a combustion control device (e.g., incinerator, flare, boiler or process heater with a design heat capacity of at least 44 MW, boiler or process heater where the vent stream is introduced into the flame

zone), electrostatic precipitator, or scrubber but wants to monitor a parameter other than those specified; or

(c) [63.1573(d)(3)]
the permittee wishes to use another type of continuous emission monitoring system that provides direct measurement of a pollutant (i.e., a PM or multi-metals HAP continuous emission monitoring system, a carbonyl sulfide/carbon disulfide continuous emission monitoring system, a TOC continuous emission monitoring system, or HCl continuous emission monitoring system).

iv. [63.1573(e)] REQUESTING MONITOR ALTERNATIVE PARAMETERS
The permittee shall submit a request for review and approval or disapproval to the Administrator of the EPA. The request shall include the information in 63.1573 (e)(1) through (5) below.

(a) [63.1573(e)(1)]
A description of each affected source and the parameter(s) to be monitored to determine whether the affected source will continuously comply with the emission limitations and an explanation of the criteria used to select the parameter(s).

(b) [63.1573(e)(2)]
A description of the methods and procedures that will be used to demonstrate that the parameter can be used to determine whether the affected source will continuously comply with the emission limitations and the schedule for this demonstration. The permittee shall certify that an operating limit will be established for the monitored parameter(s) that represents the conditions in existence when the control device is being properly operated and maintained to meet the emission limitation.

(c) [63.1573(e)(3)]
The frequency and content of monitoring, recording, and reporting, if monitoring and recording are not continuous. The permittee also shall include the rationale for the proposed monitoring, recording, and reporting requirements.

(d) [63.1573(e)(4)]
Supporting calculations.

(e) [63.1573(e)(5)]
Averaging time for the alternative operating parameter.

g. [63.1576] RECORD KEEPING REQUIREMENTS - 40 CFR Part 63, Subpart UUU

i. [63.1576(a)]

The permittee shall keep the records specified in 63.1576(a)(1) through (3) below.

(a) [63.1576(a)(1)]
A copy of each notification and report that the permittee submitted to comply with 40 CFR Part 63, Subpart UUU, including all documentation supporting any initial notification or Notification of Compliance Status that the permittee submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv).

(b) [63.1576(a)(2)]
The records in 40 CFR 63.6(e)(1)(iii) through (v) related to startup, shutdown, and malfunction.

(c) [63.1576(a)(3)]
Records of performance tests, performance evaluations, and visible emission observations as required in 40 CFR 63.10(b)(2)(viii).

ii. [63.1576(b)]
For each continuous emission monitoring system and continuous opacity monitoring system, the permittee shall keep the records required in 63.1576(b)(1) through (5) [See section A.III].

(a) [63.1576(b)(1)]
Records described in 40 CFR 63.10(b)(2)(vi) through (xi) of Subpart A.

(b) [63.1576(b)(2)]
Monitoring data for continuous opacity monitoring systems during a performance evaluation as required in 40 CFR 63.6(h)(7)(i) and (ii) of Subpart A.

(c) [63.1576(b)(3)]
Previous (i.e., superceded) versions of the performance evaluation plan as required in 40 CFR 63.8(d)(3) of Subpart A.

(d) [63.1576(b)(4)]
Requests for alternatives to the relative accuracy test for continuous emission monitoring systems as required in 40 CFR 63.8(f)(6)(i) of Subpart A.

(e) [63.1576(b)(5)]
Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

iii. [63.1576(c)]

The permittee shall keep the records in 40 CFR 63.6(h) for visible emission observations.

iv. [63.1576(d)]
The permittee shall keep records required by Tables 6, 7, 13, and 14 [See section A.VI.] (for catalytic cracking units) and Table 39 [See section A.VI.] (for bypass lines) to show continuous compliance with each emission limitation that applies to this emissions unit.

v. [63.1576(e)]
The permittee shall keep a current copy of the operation, maintenance, and monitoring plan onsite and available for inspection. The permittee also shall keep records to show continuous compliance with the procedures in the operation, maintenance, and monitoring plan.

vi. [63.1576(f)]
The permittee also shall keep the records of any changes that affect emission control system performance including, but not limited to, the location at which the vent stream is introduced into the flame zone for a boiler or process heater.

vii. [63.1576(g)]
The records shall be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1).

viii. [63.1576(h)]
As specified in 40 CFR 63.10(b)(1), the permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

ix. [63.1576(i)]
The permittee shall keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee can keep the records offsite for the remaining 3 years.

## IV. Reporting Requirements

1. Continuous Opacity Monitoring Requirements

Pursuant to 40 CFR Part 51, Appendix P, Paragraph 4.0, the permittee shall submit reports on a quarterly basis to the Toledo Division of Environmental Services documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07, detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective actions taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

The permittee shall submit reports within 30 days following the end of each calendar quarter to the Toledo Division of Environmental Services documenting any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

2. Reporting Requirements for $SO_2$ Continuous Emissions Monitoring System

a. The permittee shall submit a $SO_2$ excess emissions and monitoring systems performance report and/or a summary report form (see paragraph (d) of 40 CFR 60.7) to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each 12-hour period in which emissions exceed 0.92 pounds $SO_2$ per thousand pounds of fresh feed. Written reports of excess emissions shall include the following information:

i. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

ii. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

iii. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

iv. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

b. The $SO_2$ excess emissions summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. The data assessment report described under 40 CFR Part 60 Appendix F, Procedure 1 shall also be submitted with the summary report form.

i. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

ii. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

3. Reporting Requirements for $H_2S$ Continuous Emissions Monitoring System

a. The permittee shall submit an $H_2S$ excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average $H_2S$ concentration greater than 0.10 grain per dry standard cubic foot of fuel gas burned. Written reports of excess emissions shall include the following information:

i. the magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period;

ii. specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted;

iii. the date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and

iv. when no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

b. The $H_2S$ excess emissions summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

i. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

ii. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

4. Common Reporting Requirements for Continuous $H_2S$ and $SO_2$ Continuous Emissions Monitoring Systems

a. The permittee shall submit a quarterly report for each CEMS, the accuracy results from Section 6 and the CD assessment results from Section 4 of 40 CFR Part 60 Appendix F Procedure 1. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions. As a minimum, the DAR shall contain the following information:

i. permittee name and address;

ii. identification and location of monitors in the CEMS;

iii. manufacturer and model number of each monitor in the CEMS;

iv. assessment of CEMS data accuracy and date of assessment as determined by a Relative Accuracy Test Audit (RATA), Relative Accuracy Audit (RAA), or Cylinder Gas Audit (CGA) described in Section 5 including the relative accuracy for the RATA, the Accuracy (A) for the RAA or CGA, the Reference Method (RM) results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications;

v. results from EPA performance audit samples described in Section 5 and the applicable RM's; and

vi. summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5 or 40 CFR Part 60 Appendix F Procedure 1.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60 Appendix F, Procedure 1.

5. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas or natural gas was burned in the CO Boiler. Each report shall be submitted to the Toledo Division of Environmental Services within 30 days after the deviation occurs.

6. Reporting Requirements for Carbon Monoxide Emissions Monitoring System

The permittee shall submit semiannual deviation (excursion) reports that identify each period when the CO emissions from the FCCU exceeded 500 ppmvd as a one-hour average. Written deviation reports shall include the following information:

a. the total operating time of the emissions unit during the reporting period;

b. information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken;

c. information on the number, duration, and cause for monitor downtime incidents (including unknown cause, if applicable, other than downtime associated with zero and span and other daily calibration checks); and

d. if there are no deviations from the emission limitation and there was no monitor downtime, a statement that there were no deviations from the emission limitation and that the CO monitoring system was not inoperative, inactive, malfunctioning, out-of-control, repaired or adjusted.

These reports shall be submitted to the Toledo Division of Environmental Services by January 30 and July 30 of each year and shall cover the previous six calendar months.

7. See the applicable sections in Part II for equipment leaks in A.IV., referencing 40 CFR Part 60, Subpart VV. and OAC rule 3745-21-09(T).

8. [40 CFR Part 63, Subpart UUU]
The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 onward except as stated in 40 CFR 63.1574 which may have reports due before April 11, 2005.

a. [63.1574] NOTIFICATION SUBMITTAL

i. [63.1574(a)]
Except as allowed in 40 CFR 63.1574(a)(1) through (a)(3) below, the permittee shall submit all of the notifications in 40 CFR 63.6(h), 63.7(b) and (c), 63.8(e),

63.8(f)(4), 63.8(f)(6), and 63.9(b) through (h) that apply to this emissions unit by the dates specified.

(a) [63.1574(a)(1)]
The permittee shall submit the notification of the intention to construct or reconstruct according to 40 CFR 63.9(b)(5). This deadline also applies to the application for approval of construction or reconstruction and approval of construction or reconstruction based on State preconstruction review required in 40 CFR 63.5(d)(1)(i) and 63.5(f)(2).

(b) [63.1574(a)(2)]
The permittee shall submit the notification of intent to conduct a performance test required in 40 CFR 63.7(b) at least 30 calendar days before the performance test is scheduled to begin (instead of 60 days).

(c) [63.1574(a)(3)]
If the permittee is required to conduct a performance test, performance evaluation, design evaluation, visible emission observation, or other initial compliance demonstration, the permittee shall submit a notification of compliance status according to 40 CFR 63.9(h)(2)(ii). The permittee can submit this information in an operating permit application, in an amendment to an operating permit application, in a separate submission, or in any combination. If the required information has been submitted previously, the permittee does not have to provide a separate notification of compliance status. Just refer to the earlier submissions instead of duplicating and resubmitting the previously submitted information.

(i) [63.1574(a)(3)(i)]
For each initial compliance demonstration that does not include a performance test, the permittee shall submit the Notification of Compliance Status no later than 30 calendar days following completion of the initial compliance demonstration.

(ii) [63.1574(a)(3)(ii)]
For each initial compliance demonstration that includes a performance test, the permittee shall submit the notification of compliance status, including the performance test results, no later than 150 calendar days after April 11, 2005.

ii. [63.1574(c)]
As specified in 40 CFR 63.9(b)(3), if the permittee starts the new or reconstructed affected source on or after April 11, 2002, the permittee shall submit the initial notification no later than 120 days after April 11, 2005.

iii. [63.1574(d)]
The permittee also shall include the information in Table 42 [See section A.VI.] in the notification of compliance status.

iv. [63.1574(e)]
If the permittee requests an extension of compliance for an existing catalytic cracking unit as allowed in 40 CFR 63.1563(c), the permittee shall submit a notification to the Toledo Division of Environmental Services containing the required information by October 13, 2003.

v. [63.1574(f)]
As required by 40 CFR Part 63, Subpart UUU, the permittee shall prepare and implement an operation, maintenance, and monitoring plan for each affected source, control system, and continuous monitoring system. The purpose of this plan is to detail the operation, maintenance, and monitoring procedures that the permittee will follow.

(a) [63.1574(f)(1)]
The permittee shall submit the plan to the Toledo Division of Environmental Services for review and approval along with the notification of compliance status. While the permittee does not have to include the entire plan in the part 70 or 71 permit, the permittee shall include the duty to prepare and implement the plan as an applicable requirement in the part 70 or 71 operating permit. The permittee shall submit any changes to the Toledo Division of Environmental Services for review and approval and comply with the plan until the change is approved.

(b) [63.1574(f)(2)]
Each plan shall include, at a minimum, the information specified in 40 CFR 63.1574(f)(2)(i) through (x) below.

(i) [63.1574(f)(2)(i)]
Process and control device parameters to be monitored for each affected source, along with established operating limits.

(ii) [63.1574(f)(2)(ii)]
Procedures for monitoring emissions and process and control device operating parameters for each affected source.

(iii) [63.1574(f)(2)(iii)]
Procedures that will be used to determine the coke burn-rate, the volumetric flow rate (if process data is used rather than direct measurement), and the rate of combustion of liquid or solid fossil fuels if an incinerator-waste heat boiler to burn the exhaust gases from a catalyst regenerator is used.

(iv) [63.1574(f)(2)(iv)]
Procedures and analytical methods used to determine the equilibrium catalyst Ni concentration, the equilibrium catalyst Ni

concentration monthly rolling average, and the hourly or hourly average Ni operating value.

(v) [63.1574(f)(2)(vii)]
Procedures used to determine the gas flow rate for a catalytic cracking unit if the alternative procedure based on air flow rate and temperature are used.

(vi) [63.1574(f)(2)(viii)]
Monitoring schedule, including when the permittee will monitor and will not monitor the emissions unit (e.g., during the coke burn-off, regeneration process).

(vii) [63.1574(f)(2)(ix)]
Quality control plan for each continuous opacity monitoring system and continuous emission monitoring system used to meet an emission limit in 40 CFR Part 63 Subpart UUU. This plan shall include procedures used for calibrations, accuracy audits, and adjustments to the system needed to meet applicable requirements for the system.

(viii) [63.1574(f)(2)(x)]
Maintenance schedule for the emissions unit, monitoring system, and control device that is generally consistent with the manufacturer's instructions for routine and long-term maintenance.

b. [63.1575] REPORTS FOR 40 CFR Part 63, Subpart UUU

i. [63.1575(a)]
The permittee shall submit each report in Table 43 [See section A.VI.] that applies to this emissions unit.

ii. [63.1575(b)]
Unless the Administrator has approved a different schedule, the permittee shall submit each report by the date in Table 43 [See section A.VI.] and according to the requirements in 40 CFR 63.1575(b)(1) through (b)(5) below.

(a) [63.1575(b)(1)]
The first compliance report shall cover the period beginning April 11, 2005 and ending on June 30, 2005.

(b) [63.1575(b)(2)]
The first compliance report shall be postmarked or delivered no later than July 31, 2005.

(c) [63.1575(b)(3)]

Each subsequent compliance report shall cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(d) [63.1575(b)(4)]
Each subsequent compliance report shall be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(e) [63.1575(b)(5)]
For each affected emissions unit that is subject to permitting regulations pursuant to 40 CFR Part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A), the permittee may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in 63.1575(b)(1) through (b)(4) above.

iii. [63.1575(c)]
The compliance report shall contain the following information:

(a) [63.1575(c)(1)]
Company name and address.

(b) [63.1575(c)(2)]
Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

(c) [63.1575(c)(3)]
Date of report and beginning and ending dates of the reporting period.

(d) [63.1575(c)(4)]
If there are no deviations from any emission limitation that applies to this emissions unit and there are no deviations from the requirements for work practice standards, a statement that there were no deviations from the emission limitations or work practice standards during the reporting period and that no continuous emission monitoring system or continuous opacity monitoring system was inoperative, inactive, malfunctioning, out-of-control, repaired, or adjusted.

iv. [63.1575(d)]
For each deviation from an emission limitation and for each deviation from the requirements for work practice standards that occurs at an affected emissions unit where a continuous opacity monitoring system or a continuous emission monitoring system is not used to comply with the emission limitation or work practice standard in 40 CFR Part 63, Subpart UUU, the compliance report shall

contain the information in 63.1575(c)(1) through (c)(3) above and the information in 63.1575(d)(1) through (d)(3) below.

(a) [63.1575(d)(1)]
The total operating time of each affected emissions unit during the reporting period.

(b) [63.1575(d)(2)]
Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(c) [63.1575(d)(3)]
Information on the number, duration, and cause for monitor downtime incidents (including unknown cause, if applicable, other than downtime associated with zero and span and other daily calibration checks).

v. [63.1575(e)]
For each deviation from an emission limitation occurring at an affected source where a continuous opacity monitoring system or a continuous emission monitoring system is used to comply with the emission limitation, the permittee shall include the information in 40 CFR 63.1575(d)(1) through(3) above and the information in 63.1575(e)(1) through (13) below.

(a) [63.1575(e)(1)]
The date and time that each malfunction started and stopped.

(b) [63.1575(e)(2)]
The date and time that each continuous opacity monitoring system or continuous emission monitoring system was inoperative, except for zero (low-level) and high-level checks.

(c) [63.1575(e)(3)]
The date and time that each continuous opacity monitoring system or continuous emission monitoring system was out-of-control, including the information in 40 CFR 63.8(c)(8) of Subpart A.

(d) [63.1575(e)(4)]
The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(e) [63.1575(e)(5)]
A summary of the total duration of the deviation during the reporting period (recorded in minutes for opacity and hours for gases and in the averaging period specified in the regulation for other types of emission

limitations), and the total duration as a percent of the total emissions unit operating time during that reporting period.

(f) [63.1575(e)(6)]
A breakdown of the total duration of the deviations during the reporting period and into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(g) [63.1575(e)(7)]
A summary of the total duration of downtime for the continuous opacity monitoring system or continuous emission monitoring system during the reporting period (recorded in minutes for opacity and hours for gases and in the averaging time specified in the regulation for other types of standards), and the total duration of downtime for the continuous opacity monitoring system or continuous emission monitoring system as a percent of the total emissions unit operating time during that reporting period.

(h) [63.1575(e)(8)]
A breakdown of the total duration of downtime for the continuous opacity monitoring system or continuous emission monitoring system during the reporting period into periods that are due to monitoring equipment malfunctions, non-monitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes, and other unknown causes.

(i) [63.1575(e)(9)]
An identification of each HAP that was monitored at the affected source.

(j) [63.1575(e)(10)]
A brief description of the process units.

(k) [63.1575(e)(11)]
The monitoring equipment manufacturer(s) and model number(s).

(l) [63.1575(e)(12)]
The date of the latest certification or audit for the continuous opacity monitoring system or continuous emission monitoring system.

(m) [63.1575(e)(13)]
A description of any change in the continuous emission monitoring system or continuous opacity monitoring system, processes, or controls since the last reporting period.

vi. [63.1575(f)]
The permittee also shall include the information required in 63.1575(f)(1) through (f)(2) below in each compliance report, if applicable.

(a) [63.1575(f)(1)]
A copy of any performance test done during the reporting period on any affected unit. The report may be included in the next semiannual report. The copy shall include a complete report for each test method used for a particular kind of emission point tested. For additional tests performed for a similar emission point using the same method, the permittee shall submit the results and any other information required, but a complete test report is not required. A complete test report contains a brief process description; a simplified flow diagram showing affected processes, control equipment, and sampling point locations; sampling site data; description of sampling and analysis procedures and any modifications to standard procedures; quality assurance procedures; record of operating conditions during the test; record of preparation of standards; record of calibrations; raw data sheets for field sampling; raw data sheets for field and laboratory analyses; documentation of calculations; and any other information required by the test method.

(b) [63.1575(f)(2)]
Any requested change in the applicability of an emission standard (e.g., changing from the PM standard to the Ni standard for catalytic cracking units or from the HCl concentration standard to percent reduction for catalytic reforming units) in the periodic report. The permittee shall include all information and data necessary to demonstrate compliance with the new emission standard selected and any other associated requirements.

vii. [63.1575(g)]
The permittee may submit reports required by other regulations in place of or as part of the compliance report if they contain the required information.

viii. [63.1575(h)]
The reporting requirements in paragraphs 63.1575(h)(1) and (2) below apply to startups, shutdowns, and malfunctions:

(a) [63.1575(h)(1)]
When actions taken to respond are consistent with the plan, the permittee is not required to report these events in the semiannual compliance report and the reporting requirements in 40 CFR 63.6(e)(3)(iii) and 63.10(d)(5) do not apply.

(b) [63.1575(h)(2)]
When actions taken to respond are not consistent with the plan, the permittee shall report these events and the response taken in the semiannual compliance report. In this case, the reporting requirements in 40 CFR 63.6(e)(3)(iv) and 63.10(d)(5) do not apply.

9. General Reporting Requirements

   a. All requests, reports, applications, submittals, and other communications pursuant to this permit shall be submitted to: Toledo Division of Environmental Services, Air Resources Section, 348 South Erie Street, Toledo, Ohio 43602-1633.

   b. All requests, reports, applications, submittals, and other communications to the Administrator pursuant to this permit shall be submitted to: Director Ohio EPA c/o Bob Hodanbosi, Ohio EPA, Lazarus Government Center, P.O. Box 1049, Columbus, OH 43216-1049.

   c. If any State requires a submittal that contains all the information required in an application, notification, request, report, statement, or other communication required in this permit, the permittee may send the appropriate Regional Office of the EPA a copy of that submittal to satisfy the requirements of this part for that communication.

   If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

## V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emission Limitation:

      20 percent opacity as a six-minute average

      Applicable Compliance Method:

      If required, Method 9 of 40 CFR Part 60 Appendix A shall be used to demonstrate compliance.

   b. Emission Limitation:

      91.7 pounds per hour particulate emissions

      Applicable Compliance Method:

      If required, the procedures specified under OAC rule 3745-17-03(B)(10) shall be used to demonstrate compliance.

   c. Emission Limitation:

      0.020 pound particulate emissions per million Btu of actual heat input

      Applicable Compliance Method:

If required, the procedure specified under OAC rule 3745-17-03(B)(9) shall be used to demonstrate compliance.

d. Emission Limitation:

0.92 pound $SO_2$ per thousand pounds of fresh feed

Applicable Compliance Method:

If required, the procedures specified under OAC rule 3745-18-04(A) shall be used to demonstrate compliance.

e. Emission Limitation:

0.10 grain $H_2S$ per dry standard cubic foot of fuel gas burned as a volume-weighted, rolling 3-hour average

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the methods and procedures of 40 CFR 60.106(e)(1).

f. Emission Limitation:

particulate emissions shall not exceed 1 pound per 1,000 pounds of coke burned

Applicable Compliance Method:

If required, the procedures specified under 40 CFR 63.1571 and under the conditions specified in Table 4 of 40 CFR Part 63, Subpart UUU shall be used to demonstrate compliance.

g. Emission Limitation:

500 ppmvd as a one-hour average

Applicable Compliance Method:

If required, Method 10 of 40 CFR Part 60, Appendix A shall be used to demonstrate compliance. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

h. Emission Limitation:

Emission limitation options under A.I.2.j, A.i.2.k and A.I.2.m
Applicable Compliance Method:

The permittee shall demonstrate continuous compliance with the emission limitation options according to A.III.7.

2. Each CEMS shall be audited at least once each calendar quarter. Successive quarterly audits shall occur no closer than 2 months. The audits shall be conducted as follows:

   a. Relative Accuracy Test Audit (RATA). The RATA shall be conducted at least once every four calendar quarters. Conduct the RATA as described for the RA test procedure in the applicable PS in Appendix B of 40 CFR Part 60 (e.g., PS 2 for $_{SO2}$ and $NO_X$). In addition, analyze the appropriate performance audit samples received from USEPA as described in the applicable sampling methods (e.g., Methods 6 and 7).

      i. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

      ii. Personnel from the Toledo Division of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

   b. Cylinder Gas Audit (CGA). If applicable, a CGA may be conducted in three of four calendar quarters, but in no more than three quarters in succession.

   c. Relative Accuracy Audit (RAA). The RAA may be conducted three of four calendar quarters, but in no more than three quarters in succession. To conduct a RAA, follow the procedure described in the applicable PS in Appendix B of 40 CFR Part 60 for the relative accuracy test, except that only three sets of measurement data are required. Analyses of USEPA performance audit samples are also required.

3. Emission testing requirements

   a. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

      i. The emission testing shall be conducted every 2.5 years after the effective date of this permit.

      ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulate emissions and $SO_2$.

iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

(a) For Particulate Emissions: Methods 1 through 4 and 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA. The representative average pounds of particulate emissions per hour shall be calculated according to the following method as described in the March 6, 1979 memo from the U.S. EPA Director of the Division of Stationary Source Enforcement regarding the effect on non-continuous, non-automatic soot blowing during performance testing steam generators that are subject to NSPS.

where:

E = pounds of particulate emissions per hour (average for daily operating time)

$E_{SBR}$ = average E of sample(s) containing soot blowing

$E_{NOSB}$ = average E of sample(s) with no soot blowing

A = hours soot blowing during sample(s)

B = hours not soot blowing during sample(s) containing soot blowing

R = average hours of operation per 24 hours

S = average hours of soot blowing per 24 hours

(b) For $SO_2$ emissions: Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A shall be used to demonstrate compliance. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA. A relative accuracy test audit (RATA) conducted within 6 months of this time frame can be used in lieu of a separate stack test provided the following conditions are met.

(i) Three (3) RATA test runs are added together to equal one (1) stack test run;

(ii) The emissions unit is operating at or near it's maximum capacity; and,

(iii) The drift test passes at the end of each RATA test run.

b. The test(s) shall be conducted while the emissions unit is operating at or near its maximum catalyst circulation rate and cold catalyst addition rate, unless otherwise specified or approved by the Toledo Division of Environmental Services. At least one of

the test runs shall be performed during a period of representative soot blowing for not less than one hour.

c. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

d. Personnel from the Toledo Division of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

e. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Toledo Division of Environmental Services within 30 days following completion of the test(s). The test report shall also include the following information obtained during the test:

i. continuous opacity monitoring data generated through each test run (six-minute average);

ii. FCCU fresh gas oil feed rate (barrels per day);

iii. Catalyst circulation rate (tons per hour);

iv. cold catalyst addition rate (tons per hour); and,

v. $DeSO_x$ catalyst addition rate (pounds per hour)

The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Toledo Division of Environmental Services.

4. See the applicable sections in Part II for equipment leaks in A.V., referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

5. [40 CFR Part 63, Subpart UUU]
The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 onward, however the initial testing may need to be done before that date.

a. [63.1564(b)] DEMONSTRATING INITIAL COMPLIANCE WITH THE METAL HAP EMISSIONS AND WORK PRACTICE STANDARDS FOR CATALYTIC CRACKING UNITS

i. [63.1564(b)(1)]
The permittee shall install, operate, and maintain a continuous monitoring system(s) according to the requirements in 40 CFR 63.1572 [See section A.III.] and Table 3 [See section A.VI.].

ii. [63.1564(b)(2)]
The permittee shall conduct a performance test for each catalytic cracking unit not subject to the NSPS for PM according to the requirements in 40 CFR 63.1571 [See section A.V.] and under the conditions specified in Table 4 [See section A.VI.].

iii. [63.1564(b)(3)]
The permittee shall establish each site-specific operating limit in Table 2 [See section A.VI.] that applies to this emissions unit according to the procedures in Table 4 [See section A.VI.].

iv. [63.1564(b)(4)]
The permittee shall use the procedures in 40 CFR 63.1564(b)(4)(i) through (iv) below to determine initial compliance with the emission limitations.

(a) [63.1564(b)(4)(i)]
If Option 1 is elected in 40 CFR 63.1564(a)(1)(i) [See section A.I.2], the NSPS requirements, compute the PM emission rate (lb/1,000 lbs of coke burn-off) for each run using Equations 1, 2, and 3 (if applicable) below as follows:

*(Eq.1)*

[redacted]

Where:
$R_c$ = Coke burn-off rate, kg/hr (lb/hr);
$Q_r$ = Volumetric flow rate of exhaust gas from catalyst regenerator before adding air or gas streams. Example: The permittee may measure after an electrostatic precipitator, but the permittee shall measure before a carbon monoxide boiler, dscm/min (dscf/min);
$Q_a$ = Volumetric flow rate of air to catalytic cracking unit catalyst regenerator, as determined from instruments in the catalytic cracking unit control room, dscm/min (dscf/min);
$\%CO_2$ = Carbon dioxide concentration in regenerator exhaust, percent by volume (dry basis);
%CO = Carbon monoxide concentration in regenerator exhaust, percent by volume (dry basis);
$\%O_2$ = Oxygen concentration in regenerator exhaust, percent by volume (dry basis);

$K_1$ = Material balance and conversion factor, 0.2982 (kg-min)/(hr-dscm-%) (0.0186 (lb-min)/(hr-dscf-%));
$K_2$ = Material balance and conversion factor, 2.088 (kg-min)/(hr-dscm) (0.1303 (lb-min)/(hr-dscf));
$K_3$ = Material balance and conversion factor, 0.0994 (kg-min)/(hr-dscm-%) (0.0062 (lb-min)/(hr-dscf-%));
$Q_{oxy}$ = Volumetric flow rate of oxygen-enriched air stream to regenerator, as determined from instruments in the catalytic cracking unit control room, dscm/min (dscf/min); and
$\%O_{xy}$ = Oxygen concentration in oxygen-enriched air stream, percent by volume (dry basis).

*(Eq.2)*

Where:
E = Emission rate of PM, kg/1,000 kg (lb/1,000 lb) of coke burn-off;
$C_s$ = Concentration of PM, g/dscm (lb/dscf);
$Q_{sd}$ = Volumetric flow rate of the catalytic cracking unit catalyst regenerator flue gas as measured by Method 2 in 40 CFR Part 60, Appendix A, dscm/hr (dscf/hr);
$R_c$ = Coke burn-off rate, kg coke/hr (1,000 lb coke/hr); and
K = Conversion factor, 1.0 (kg $^2$/g)/(1,000 kg) (1,000 lb/(1,000 lb)).

*(Eq.3)*

Where:
$E_s$ = Emission rate of PM allowed, kg/1,000 kg (1b/1,000 lb) of coke burn-off in catalyst regenerator;
1.0 = Emission limitation, kg coke/1,000 kg (lb coke/1,000 lb);
A = Allowable incremental rate of PM emissions, 0.18 g/million cal (0.10 lb/million Btu); and
H = Heat input rate from solid or liquid fossil fuel, million cal/hr (million Btu/hr). Make sure the Toledo Division of Environmental Services approves procedures for determining the heat input rate.
$R_c$ = Coke burn-off rate, kg coke/hr (1,000 lb coke/hr) determined using Equation 1 above; and
K' = Conversion factor to units to standard, 1.0 (kg$^2$/g)/(1,000 kg) ($10^3$ lb/(1,000 lb)).

(b) [63.1564(b)(4)(ii)]
If Option 2 is elected in 40 CFR 63.1564(a)(1)(ii) [See section A.I.2], the PM emission limit, compute the PM emission rate (lb/1,000 lbs of coke burn-off) using Equations 1 and 2 above and the site-specific opacity operating limit (if a continuous opacity monitoring system is used) using Equation 4 of this section as follows:

*(Eq. 4)*

[illegible]

Where:
Opacity limit = Maximum permissible hourly average opacity, percent, or 10 percent, whichever is greater;
$Opacity_{st}$ = Hourly average opacity measured during the emissions unit test runs, percent; and
$PMEmR_{st}$ = PM emission rate measured during the emissions unit test, lb/1,000 lbs coke burn.

(c) [63.1564(b)(4)(iii)]
If Option 3 is elected in 63.1564(a)(1)(iii) [See section A.I.2.], the Ni lb/hr emission limit, compute the Ni emission rate using Equation 5 below and the site-specific Ni operating limit (if the permittee uses a continuous opacity monitoring system) using Equations 6 and 7 below as follows:

*(Eq. 5)*

[illegible]

Where:
$E_{Ni1}$ = Mass emission rate of Ni, mg/hr (lb/hr); and
$C_{Ni}$ = Ni concentration in the catalytic cracking unit catalyst regenerator flue gas as measured by Method 29 in Appendix A of 40 CFR Part 60, mg/dscm (lbs/dscf).

*(Eq. 6)*

[illegible]

Where:
$Opacity_l$ = Opacity value for use in Equation 7 below, percent, or 10 percent, whichever is greater; and
$NiEmR1_{st}$ = Average Ni emission rate calculated as the arithmetic average Ni emission rate using Equation 5 above for each of the performance test runs, g Ni/hr.

*(Eq. 7)*

[illegible]

Where:
Ni operating $limit_1$ = Maximum permissible hourly average Ni operating limit, percent-acfm-ppmw, i.e., the site-specific Ni operating limit;
$Q_{mon,st}$ = Hourly average actual gas flow rate as measured by the continuous parameter monitoring system during the performance test or using the alternative procedure in 40 CFR 63.1573 [See section A.III.], acfm; and
$E\text{-}Cat_{st}$ = Ni concentration on equilibrium catalyst measured during emissions unit test, ppmw.

(d) [63.1564(b)(4)(iv)]
If Option 4 is elected in 63.1564(a)(1)(iv) [See section A.I.2], the Ni lbs/1,000 lbs of coke burn-off emission limit, compute the Ni emission rate using Equations 1 and 8 below and the site-specific Ni operating limit (if the permittee use a continuous opacity monitoring system) using Equations 9 and 10 below as follows:

*(Eq. 8)*

[illegible]

Where:
$E_{Ni2}$ = Normalized mass emission rate of Ni, mg/kg coke (lb/1,000 lbs coke).

*(Eq. 9)*

[redacted]

Where:
$Opacity_2$ = Opacity value for use in Equation 10 below, percent, or 10 percent, whichever is greater; and
$NiEmR2_{st}$ = Average Ni emission rate calculated as the arithmetic average Ni emission rate using Equation 8 above for each of the performance test runs, mg/kg coke.

*(Eq. 10)*

[redacted]

Where:
Ni operating $limit_2$ = Maximum permissible hourly average Ni operating limit, percent-ppmw-acfm-hr/kg coke, i.e., the site-specific Ni operating limit; and
$R_{c,st}$ = Coke burn rate from Equation 1 above, as measured during the initial performance test, kg coke/hr.

v. [63.1564(b)(5)]
The permittee shall demonstrate initial compliance with each emission limitation that applies to this emissions unit according to Table 5 [See section A.VI.].

vi. [63.1564(b)(6)]
The permittee shall demonstrate initial compliance with the work practice standard in 63.1564(a)(3) [See section A.III.] by submitting the operation, maintenance, and monitoring plan to the Toledo Division of Environmental Services as part of the Notification of Compliance Status.

vii. [63.1564(b)(7)]
The permittee shall submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 40 CFR 63.1574 [See section A.IV.].

b. [63.1564(c)] DEMONSTRATING CONTINUOUS COMPLIANCE WITH THE METAL HAP EMISSIONS AND WORK PRACTICE STANDARDS FOR CATALYTIC CRACKING UNITS - 40 CFR Part 63, Subpart UUU

i. [63.1564(c)(1)]
The permittee shall demonstrate continuous compliance with each emission limitation in Tables 1 and 2 [See section A.VI.] that applies to this emissions unit according to the methods specified in Tables 6 and 7 [See section A.VI.].

ii. [63.1564(c)(2)]
The permittee shall demonstrate continuous compliance with the work practice standard in 40 CFR 63.1564(a)(3) [See section A.III.] by maintaining records to document conformance with the procedures in the operation, maintenance, and monitoring plan.

iii. [63.1564(c)(3)]
If the permittee uses a continuous opacity monitoring system and elects to comply with Option 3 in 40 CFR 63.1564(a)(1)(iii) [See section A.I.2], the permittee shall determine continuous compliance with the site-specific Ni operating limit by using Equation 11 of this section as follows:

*(Eq. 11)*

Where:
Ni operating value$_1$ = Maximum permissible hourly average Ni standard operating value, %-acfm-ppmw;
Opacity = Hourly average opacity, percent;
$Q_{mon}$ = Hourly average actual gas flow rate as measured by continuous parameter monitoring system or calculated by alternative procedure in 40 CFR 63.1573 [See section A.III.], acfm; and
E-Cat = Ni concentration on equilibrium catalyst from weekly or more recent measurement, ppmw.

iv. [63.1564(c)(4)]
If the permittee uses a continuous opacity monitoring system and elects to comply with Option 4 in 40 CFR 63.1564(a)(1)(iv) [See section A.I.2], the permittee shall determine continuous compliance with the site-specific Ni operating limit by using Equation 12 of this section as follows:

*(Eq. 12)*

Where:
Ni operating value$_2$ = Maximum permissible hourly average Ni standard operating value, percent-acfm-ppmw-hr/kg coke.

c. [63.1565(b)] DEMONSTRATING INITIAL COMPLIANCE WITH THE ORGANIC HAP EMISSIONS AND WORK PRACTICE STANDARDS FOR CATALYTIC CRACKING UNITS - 40 CFR Part 63, Subpart UUU

i. [63.1565(b)(1)]
The permittee shall install, operate, and maintain a continuous monitoring system according to the requirements in 40 CFR 63.1572 [See section A.III.] and Table 10 [See section A.VI.]. Except:

(a) [63.1565)(b)(1)(i)]
Whether or not the catalytic cracking unit is subject to the NSPS for CO in 40 CFR 60.103, the permittee doesn't have to install and operate a continuous emission monitoring system if its shown that CO emissions from the vent average less than 50 parts per million (ppm), dry basis. The permittee shall get an exemption from the permitting authority, based on the permittee’s written request. To show that the emissions average is less than 50 ppm (dry basis), the permittee shall continuously monitor CO emissions for 30 days using a CO continuous emission monitoring system that meets the requirements in 40 CFR 63.1572 [See section A.III.].

(b) [63.1565)(b)(1)(ii)]
If the catalytic cracking unit isn't subject to the NSPS for CO, the permittee doesn't have to install and operate a continuous emission monitoring system or a continuous parameter monitoring system if the permittee vents emissions to a boiler (including a "CO boiler") or process heater that has a design heat input capacity of at least 44 megawatts (MW).

(c) [63.1565)(b)(1)(iii)]
If the catalytic cracking unit isn't subject to the NSPS for CO, the permittee doesn't have to install and operate a continuous emission monitoring system or a continuous parameter monitoring system if the permittee vents emissions to a boiler or process heater in which all vent streams are introduced into the flame zone.

ii. [63.1565(b)(2)]
The permittee shall conduct each performance test for a catalytic cracking unit not subject to the NSPS for CO according to the requirements in 40 CFR 63.1571 [See section A.V.] and under the conditions specified in Table 11 [See section A.VI.] of 40 CFR Part 63, Subpart UUU.

iii. [63.1565(b)(3)]
The permittee shall establish each site-specific operating limit in Table 9 [See section A.VI.] that applies to this emissions unit according to the procedures in Table 11 [See section A.VI.].

iv. [63.1565(b)(4)]
The permittee shall demonstrate initial compliance with each emission limitation that applies to this emissions unit according to Table 12 [See section A.VI.].

v. [63.1565(b)(5)]
The permittee shall demonstrate initial compliance with the work practice standard in 40 CFR 63.1656(a)(3) [See section A.I.2] by submitting the operation, maintenance, and monitoring plan to the Toledo Division of Environmental Services as part of the Notification of Compliance Status according to 40 CFR 63.1574 [See section A.IV.].

vi. [63.1565(b)(6)]
The permittee shall submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 40 CFR 63.1574 [See section A.IV.].

d. [63.1565(c)] DEMONSTRATING CONTINUOUS COMPLIANCE WITH THE ORGANIC HAP EMISSIONS AND WORK PRACTICE STANDARDS FOR CATALYTIC CRACKING UNITS - 40 CFR Part 63, Subpart UUU

i. [63.1565(c)(1)]
The permittee shall demonstrate continuous compliance with each emission limitation in Tables 8 and 9 [See section A.VI.] of this subpart that applies to this emissions unit according to the methods specified in Tables 13 and 14 [See section A.VI.].

ii. [63.1565(c)(2)]
The permittee shall demonstrate continuous compliance with the work practice standard in 40 CFR 63.1565(a)(3) [See section A.III.] by complying with the procedures in the operation, maintenance, and monitoring plan.

e. [63.1569(b)] DEMONSTRATING INITIAL COMPLIANCE WITH THE WORK PRACTICE STANDARDS FOR BYPASS LINES - 40 CFR Part 63, Subpart UUU

i. [63.1569(b)(1)]

If the permittee elects the option in 63.1569(a)(1)(i) [See section A.I.2], the permittee shall conduct each performance test for a bypass line according to the requirements in 40 CFR 63.1571 [See section A.V.] and under the conditions specified in Table 37 [See section A.VI.].

ii. [63.1569(b)(2)]
The permittee shall demonstrate initial compliance with each work practice standard in Table 36 [See section A.VI.] that applies to this emissions unit according to Table 38 [See section A.VI.].

iii. [63.1569(b)(3)]
The permittee shall demonstrate initial compliance with the work practice standard in 63.1569(a)(3) [See section A.III.] by submitting the operation, maintenance, and monitoring plan to the Toledo Division of Environmental Services as part of the notification of compliance status.

iv. [63.1569(b)(4)]
The permittee shall submit the notification of compliance status containing the results of the initial compliance demonstration according to the requirements in 40 CFR 63.1574 [See section A.IV.].

f. [63.1569(c)] DEMONSTRATING CONTINUOUS COMPLIANCE WITH THE WORK PRACTICE STANDARDS FOR BYPASS LINES - 40 CFR Part 63, Subpart UUU

i. [63.1569(c)(1)]
The permittee shall demonstrate continuous compliance with each work practice standard in Table 36 [See section A.VI.] that applies to this emissions unit according to the requirements in Table 39 [See section A.VI.].

ii. [63.1569(c)(2)]
The permittee shall demonstrate continuous compliance with the work practice standard in 63.1569(a)(2) [See section A.I.2.] by complying with the procedures in the operation, maintenance, and monitoring plan.

g. [63.1571] PERFORMANCE TEST AND OTHER INITIAL COMPLIANCE DEMONSTRATION - 40 CFR Part 63, Subpart UUU

i. [63.1571(a)]
The permittee shall conduct performance tests and report the results by no later than 150 days after April 11, 2005 and according to the provisions in 40 CFR 63.6(a)(2) of Subpart A.

(a) [63.1571(a)(1)]
For each emission limitation or work practice standard where initial compliance is not demonstrated using a performance test, opacity observation, or visible emission observation, the permittee shall conduct

the initial compliance demonstration within 30 calendar days after April 11, 2005.

(b) [63.1571(a)(2)]
For each emission limitation where the averaging period is 30 days, the 30-day period for demonstrating initial compliance begins at 12:00 a.m. on April 11, 2005 and ends at 11:59 p.m., May 11, 2005.

ii. [63.1571(b)] GENERAL REQUIREMENTS FOR PERFORMANCE TESTS AND PERFORMANCE EVALUATIONS
The permittee shall:

(a) [63.1571(b)(1)]
conduct each performance test according to the requirements in 40 CFR 63.7(e)(1);

(b) [63.1571(b)(2)]
except for opacity and visible emission observations, conduct three separate test runs for each performance test as specified in 40 CFR 63.7(e)(3). Each test run shall last at least 1 hour;

(c) [63.1571(b)(3)]
conduct each performance evaluation according to the requirements in 40 CFR 63.8(e);

(d) [63.1571(b)(4)]
not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in 40 CFR 63.7(e)(1); and

(e) [63.1571(b)(5)]
calculate the average emission rate for the performance test by calculating the emission rate for each individual test run in the units of the applicable emission limitation using Equation 2, 5, or 8 of 40 CFR 63.1564 [See section A.V.], and determining the arithmetic average of the calculated emission rates.

iii. [63.1571(c)] ENGINEERING ASSESSMENT
The permittee may choose to use an engineering assessment to calculate the process vent flow rate, net heating value, TOC emission rate, and total organic HAP emission rate expected to yield the highest daily emission rate when determining the emission reduction or outlet concentration for the organic HAP standard for catalytic reforming units. If an engineering assessment is used, the permittee shall document all data, assumptions, and procedures to the satisfaction of the Toledo Division of Environmental Services. An engineering assessment may include the approaches listed in 40 CFR 63.1571(c)(1) through (c)(4) below. Other engineering assessments may be used but are subject to review and approval by the Toledo Division of Environmental Services.

(a) [63.1571(c)(1)]
The permittee may use previous test results provided the tests are representative of current operating practices at the emissions unit, and provided EPA methods or approved alternatives were used;

(b) [63.1571(c)(2)]
The permittee may use bench-scale or pilot-scale test data representative of the process under representative operating conditions;

(c) [63.1571(c)(3)]
The permittee may use maximum flow rate, TOC emission rate, organic HAP emission rate, or organic HAP or TOC concentration specified or implied within a permit limit applicable to the process vent; or

(d) [63.1571(c)(4)]
The permittee may use design analysis based on engineering principles, measurable process parameters, or physical or chemical laws or properties. Examples of analytical methods include, but are not limited to:

(i) [63.1571(c)(4)(i)]
use of material balances based on process stoichiometry to estimate maximum TOC concentrations;

(ii) [63.1571(c)(4)(ii)]
calculation of hourly average maximum flow rate based on physical equipment design such as pump or blower capacities; and

(iii) [63.1571(c)(4)(iii)]
calculation of TOC concentrations based on saturation conditions.

iv. [63.1571(d)] ADJUSTING THE PROCESS OR CONTROL DEVICE MEASURED VALUES WHEN ESTABLISHING AN OPERATING LIMIT
If the permittee does a performance test to demonstrate compliance, the permittee shall base the process or control device operating limits for continuous parameter monitoring systems on the results measured during the performance test. The permittee may adjust the values measured during the performance test according to the criteria in 40 CFR 63.1571(d)(1) through (d)(3) below.

(a) [63.1571(d)(1)]
If the permittee elects the option in 40 CFR 63.1564(a)(1)(iii) [See section A.I.2.] (Ni lb/hr), and uses continuous parameter monitoring systems, the permittee shall establish an operating limit for the equilibrium catalyst Ni concentration based on the laboratory analysis of the equilibrium catalyst Ni concentration from the initial performance test. 40 CFR 63.1564(b)(2) [See section A.V.] allows the permittee to adjust the laboratory measurements of the equilibrium catalyst Ni

concentration to the maximum level. The permittee shall make this adjustment using Equation 1 below as follows:

*(Eq.1)*

Where:
Ecat-Limit = Operating limit for equilibrium catalyst Ni concentration, mg/kg;
$NiEmR1_{st}$ = Average Ni emission rate calculated as the arithmetic average Ni emission rate using Equation 5 below for each performance test run, g Ni/hr; and
$Ecat_{st}$ = Average equilibrium Ni concentration from laboratory test results, mg/kg.

(b) [63.1571(d)(2)]
If the permittee elects the option in 40 CFR 63.1564(a)(1)(iv) [See section A.I.2.] (Ni lb/1,000 lb of coke burn-off), and use continuous parameter monitoring systems, the permittee shall establish an operating limit for the equilibrium catalyst Ni concentration based on the laboratory analysis of the equilibrium catalyst Ni concentration from the initial performance test. Section 63.1464(b)(2) [See section A.V.] allows the permittee to adjust the laboratory measurements of the equilibrium catalyst Ni concentration to the maximum level. The permittee shall make this adjustment using Equation 2 below as follows:

*(Eq. 2)*

Where:

$NiEmR2_{st}$ = Average Ni emission rate calculated as the arithmetic average Ni emission rate using Equation 8 of 40 CFR 63.1564 [See section A.V.] for each performance test run, mg/kg coke burn-off.

(c) [63.1571(d)(3)]
If the permittee chooses to adjust the equilibrium catalyst Ni concentration to the maximum level, the permittee can't adjust any other monitored operating parameter (i.e., gas flow rate, voltage, pressure drop, liquid-to-gas ratio).

(d) [63.1571(d)(4)]
If the permittee uses continuous parameter monitoring systems, the permittee may adjust one of the monitored operating parameters (flow rate, voltage and secondary current, pressure drop, liquid-to-gas ratio) from the average of measured values during the performance test to the maximum value (or minimum value, if applicable) representative of worst-case operating conditions, if necessary. This adjustment of measured values may be done using control device design specifications, manufacturer recommendations, or other applicable information. The permittee shall provide supporting documentation and rationale in the Notification of Compliance Status, demonstrating to the satisfaction of the Toledo Division of Environmental Services, that the affected source complies with the applicable emission limit at the operating limit based on adjusted values.

v. [63.1571(e)]
The permittee may change the established operating limit by meeting the requirements in 40 CFR 63.1571(e)(1) through (3) below.

(a) [63.1571(e)(1)]
The permittee may change the established operating limit for a continuous parameter monitoring system by doing an additional performance test, a performance test in conjunction with an engineering assessment, or an engineering assessment to verify that, at the new operating limit, the permittee is in compliance with the applicable emission limitation.

(b) [63.1571(e)(2)]
The permittee shall establish a revised operating limit for the continuous parameter monitoring system if changes are made in the process or operating conditions that could affect control system performance or designated conditions are changed after the last performance or compliance tests were done. The permittee can establish the revised operating limit as described in 40 CFR 63.1571(e)(1) above.

(c) [63.1571(e)(3)]
The permittee may change the site-specific opacity operating limit or Ni operating limit only by doing a new performance test.

## VI. Miscellaneous Requirements

1. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3 of 40 CFR Part 60 Appendix F Procedure 1, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the permittee shall audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA shall always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not

require analysis of EPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

2. [40 CFR Part 63, Subpart UUU]
The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 onward, however the initial compliance reports and initial testing will need to be done before that date.

   a. The following tables from 40 CFR Part 63, Subpart UUU are attached:
   Tables 1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 12; 13; 14; 36; 37; 38; 39; 40; 41; 42; 43 and 44.

**TABLE 1 TO Subpart UUU OF PART 63.**—METAL HAP EMISSION LIMITS FOR CATALYTIC CRACKING UNITS

[As stated in § 63.1564(a)(1), you shall meet each emission limitation in the following table that applies to you]

| For each new or existing catalytic cracking unit * * * | You shall meet the following emission limits for each catalyst regenerator vent * * |
|---|---|
| 1. Subject to the new source performance standard (NSPS) for PM in 40 CFR 60.102. | PM emissions shall not exceed 1.0 kilogram (kg) per 1,000 kg (1.0 lb/1,000 lb) of coke burn-off in the catalyst regenerator; if the discharged gases pass through an incinerator or waste heat boiler in which you burn auxiliary or supplemental liquid or solid fossil fuel, you shall limit the incremental rate of PM to no more than 43.0 grams per Megajoule (g/MJ) or 0.10 pounds per million British thermal units (lb/million Btu) of heat input attributable to the liquid or solid fossil fuel; and the opacity of emissions shall not exceed 30 percent, except for one 6-minute average opacity reading in any 1-hour period. |
| 2. Option 1: NSPS requirements not subject to the NSPS for PM in 40 CFR 60.102. | PM emissions shall not exceed 1.0 kg/1,000 kg (1.0 lb/1,000 lb) of coke burn-off in the catalyst regenerator; if the discharged gases pass through an incinerator or waste heat boiler in which you burn auxiliary or in supplemental liquid or solid fossil fuel, you shall limit the incremental rate of PM to no more than 43.0 g/MJ or lb/million Btu of heat input attributable to the liquid or solid fossil fuel; and the opacity of emissions shall not exceed 30 percent, except for one 6-minute average opacity reading in any 1-hour period. |
| 3. Option 2: PM limit not subject to the NSPS for PM in 40 CFR 60.102. | PM emissions shall not exceed 1.0 kg/1,000 kg (1.0 lb/1,000 lbs) of coke burn-off in the catalyst regenerator. |
| 4. Option 3: Ni lb/hr not subject to the NSPS for PM in 40 CFR 60.102. | Nickel (Ni) emissions shall not exceed 13,000 milligrams per hour (mg/hr) (0.029 lb/hr). |
| 5. Option 4: Ni Lb/1,000 lbs of coke burn-off not subject to the NSPS for PM in 40 CFR 60.102. | Ni emissions shall not exceed 1.0 mg/kg (0.001 lb/1,000 lbs) of coke burn-off in the catalyst regenerator. |

**TABLE 2 TO Subpart UUU OF PART 63.**—OPERATING LIMITS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS

[As stated in § 63.1564(a)(2), you shall meet each operating limit in the following table that applies to you]

| For each new or existing catalytic cracking unit * * * | For this type of continuous monitoring system * * * | For this type of control device * * * | You shall meet this operating limit * * * |
|---|---|---|---|
| 1. Subject to the NSPS for PM in 40 CFR 60.102. | Continuous opacity monitoring system. | Not applicable ..... | Not applicable. |
| 2. Option 1: NSPS requirements not subject to the NSPS for PM in 40 CFR 60.102. | Continuous opacity monitoring system. | Not applicable ..... | Not applicable. |
| 3. Option 2: PM limit not subject to the NSPS for PM in 40 CFR 60.102. | a. Continuous opacity monitoring system. | Electrostatic precipitator ..... | Maintain the hourly average opacity of emissions from your catalyst regenerator vent no higher than the site-specific opacity limit established during the performance test. |
| | b. Continuous parameter monitoring systems. | Electrostatic precipitator ..... | Maintain the daily average gas flow rate no higher than the limit established in the performance test; and maintain the daily average voltage and secondary current (or total power input) above the limit established in the performance test. |
| | c. Continuous parameter monitoring systems. | Wet scrubber ..... | Maintain the daily average pressure drop above the limit established in the performance test (not applicable to a wet scrubber of the non-venturi jet-ejector design); and maintain the daily average liquid-to-gas ratio above the limit established in the performance test. |
| 4. Option 3: Ni lb/hr not subject to the NSPS for PM in 40 CFR 60.102. | a. Continuous opacity monitoring system. | Electrostatic precipitator ..... | Maintain the daily average Ni operating value no higher than the limit established during the performance test. |
| | b. Continuous parameter monitoring systems. | i. Electrostatic precipitator .... | Maintain the daily average gas flow rate no higher than the limit established during the performance test; maintain the monthly rolling average of the equilibrium catalyst Ni concentration no higher than the limit established during the performance test; and maintain the daily average voltage and secondary current (or total power input) above the established during the performance test. |

*(Continued)*

**(Cont.) TABLE 2 TO Subpart UUU OF PART 63**.—OPERATING LIMITS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS

[As stated in § 63.1564(a)(2), you shall meet each operating limit in the following table that applies to you]

| For each new or existing catalytic cracking unit * * * | For this type of continuous monitoring system * * * | For this type of control device * * * | You shall meet this operating limit * * * |
|---|---|---|---|
| | | ii. Wet scrubber ..... | Maintain the monthly rolling average of the equilibrium catalyst Ni concentration no higher than the limit established during the performance test; maintain the daily average pressure drop above the limit established during the performance test (not applicable to a non-venturi wet scrubber of the jet-ejector design);and maintain the daily average liquid-to-gas ratio above the limit established during the performance test. |
| 5. Option 4: Ni lb/1,000 lbs of coke burn-off not subject to the NSPS for PM in 40 CFR 60.102. | a. Continuous opacity monitoring system | Electrostatic precipitator ..... | Maintain the daily average Ni operating value no higher than the Ni operating limit established during the performance test. |
| | b. Continuous parameter monitoring systems. | i. Electrostatic precipitator .... | Maintain the monthly rolling average of the equilibrium catalyst Ni concentration no higher than the limit established during the performance test; and maintain the daily average voltage and secondary current for total power input) above the limit established during the performance test. |
| | | ii. Wet scrubber ..... | Maintain the monthly rolling average of the equilibrium catalyst Ni concentration no higher than the limit established during the performance test; maintain the daily average pressure drop above the limit established during the performance test (not applicable to a non-venturi wet scrubber of the jet-ejector design); and maintain the daily average liquid-to-gas ratio above the limit established during the performance test. |

**TABLE 3 TO Subpart UUU OF PART 63.**—CONTINUOUS MONITORING SYSTEMS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS

[As stated in § 63.1564(b)(1), you shall meet each requirement in the following table that applies to you]

| For each new or existing catalytic cracking unit * * * | If your catalytic cracking unit is * * * | And you use this type of control device for your vent * * * | You shall install, operate, and maintain a * * * |
|---|---|---|---|
| 1. Subject to the NSPS for PM in 40 CFR 60.102. | Any size ..... | Electrostatic precipitator or wet scrubber or no control device. | CONTINUOUS opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent. |
| 2. Option 1: NSPS limits not subject to the NSPS for PM in 40 CFR 60.102. | Any size ..... | Electrostatic precipitator or wet scrubber or no control device. | Continuous opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent. |
| 3. Option 2: PM limit not subject to the NSPS for PM in 40 CFR 60.102. | a. Over 20,000 barrels per day fresh feed capacity. | Electrostatic precipitator ..... | CONTINUOUS opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent. |
| | b. Up to 20,000 barrels per day fresh feed capacity. | Electrostatic precipitator ..... | Continuous opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent; or continuous parameter monitoring systems to measure and record the gas flow rate to the control device and the voltage and secondary current (or total power input) to the control device. |
| | c. Any size ..... | i. Wet scrubber ..... | (1) Continuous parameter monitoring system to measure and record the pressure drop across the scrubber, gas flow rate to the scrubber, and total liquid (or scrubbing liquor) flow rate to the scrubber.<br><br>(2) If you use a wet scrubber of the non-venturi jet-ejector design, you're not required to install and operate a continuous parameter monitoring system for pressure drop. |
| | d. Any size ..... | No electrostatic precipitator or wet scrubber. | CONTINUOUS opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent. |
| 4. Option 3: Ni lb/hr not subject to the NSPS for PM in 40 CFR 60.102. | a. Over 20,000 barrels per day fresh feed capacity. | Electrostatic precipitator ..... | CONTINUOUS opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent and continuous parameter monitoring system to measure and record the gas flow rate. |

*(Continued)*

**Continued) TABLE 3 TO Subpart UUU OF PART 63.**—CONTINUOUS MONITORING SYSTEMS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS

[As stated in § 63.1564(b)(1), you shall meet each requirement in the following table that applies to you]

| For each new or existing catalytic cracking unit * * * | If your catalytic cracking unit is * * * | And you use this type of control device for your vent * * * | You shall install, operate, and maintain a * * * |
|---|---|---|---|
| | b. Up to 20,000 barrels per day fresh feed capacity. | Electrostatic precipitator ..... | Continuous opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent and continuous parameter monitoring system to measure and record the gas flow rate; or continuous parameter monitoring systems to measure and record the gas flow rate and the voltage and secondary current (or total power input) to the control device. |
| | c. Any size ..... | Wet scrubber ..... | (1) Continuous parameter monitoring system to measure and record the pressure drop across the scrubber, gas flow rate to the scrubber, and total liquid (or scrubbing liquor) flow rate to the scrubber.<br><br>(2) If you use a wet scrubber of the non-venturi jet-ejector, design, you're not required to install and operate a continuous parameter monitoring system for pressure drop. |
| 5. Option 4: Ni lb/1,000 lbs of coke burn-off not subject to the NSPS for PM in 40 CFR 60.102. | | | |
| | d. Any size ..... | No electrostatic precipitator or wet scrubber. | Continuous opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent and continuous parameter monitoring system to measure and record the gas flow rate. |
| | a. Over 20,000 barrels per day fresh feed capacity. | Electrostatic precipitator ..... | Continuous opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent and continuous parameter monitoring system to measure and record the gas flow rate. |
| | b. Up to 20,000 barrels per day fresh feed capacity. | Electrostatic precipitator ..... | Continuous opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent and continuous parameter monitoring system to measure and record the gas flow rate; or continuous parameter monitoring systems to measure and record the gas flow rate and the voltage and secondary current (or total power input) to the control device. |

Emissions Unit ID: **P007**

**Continued) TABLE 3 TO Subpart UUU OF PART 63.**—CONTINUOUS MONITORING SYSTEMS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS

[As stated in § 63.1564(b)(1), you shall meet each requirement in the following table that applies to you]

| For each new or existing catalytic cracking unit * * * | If your catalytic cracking unit is * * * | And you use this type of control device for your vent * * * | You shall install, operate, and maintain a * * * |
|---|---|---|---|
| | c. Any size ..... | Wet scrubber ..... | Continuous parameter monitoring system to measure and record the pressure drop across the scrubber, gas flow rate to the scrubber, and total liquid (or scrubbing liquor) flow rate to the scrubber. |
| | d. Any size ..... | No electrostatic precipitator or wet scrubber | Continuous opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent and continuous parameter monitoring system to measure and record the gas flow rate. |

**TABLE 4 TO Subpart UUU OF PART 63.**—REQUIREMENTS FOR PERFORMANCE TESTS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS NOT SUBJECT TO THE NEW SOURCE PERFORMANCE STANDARD (NSPS) FOR PARTICULATE MATTER (PM)

[As stated in § 63.1564(b)(2), you shall meet each requirement in the following table that applies to you]

| For each new or existing catalytic cracking unit catalyst regenerator vent * * * | You shall * * * | Using * * * | According to these requirements * * * |
|---|---|---|---|
| 1. If you elect Option 1 in item 2 of Table 1, Option 2 in item 3 of Table 1, Option 3 in item 4 of Table 1, or Option 4 in item 5 of Table 1 of this subpart. | a. Select sampling port's location and the number of traverse ports. | Method 1 or 1A in Appendix A to part 60 of this chapter. | Sampling sites shall be located at the outlet of the control device or the outlet of the regenerator, as applicable, and prior to any releases to the atmosphere. |
| | b. Determine velocity and volumetric flow rate. | Method 2, 2A, 2C, 2D, 2F, or 2G in Appendix A to part 60 of this chapter, as applicable. | |
| | c. Conduct gas molecular weight analysis. | Method 3, 3A, or 3B in appendix A to part 60 of this chapter, as applicable. | |
| | d. Measure moisture content of the stack gas. | Method 4 in Appendix A to part 60 of this chapter. | |
| | e. If you use an electro-static precipitator, record the total number of fields in the control system and how many operated during the applicable performance test. | | |
| | f. If you use a wet scrubber, record the total amount (rate) of water (or scrubbing liquid) and the amount (rate) of makeup liquid to the scrubber during each test run. | | |
| 2. Option 1: Elect NSPS ..... | a. Measure PM emissions ..... | Method 5B or 5F (40 CFR Part 60, Appendix A) to determine PM emissions and associated moisture content for units without wet scrubbers. Method 5B (40 CFR Part 60, Appendix A) to determine PM emissions and associated moisture content for unit with wet scrubber. | You shall maintain a sampling rate of at least 0.15 dry standard cubic meters per minute (dscm/min) (0.53 dry standard cubic feet per minute (dscf/min)). |
| | b. Compute PM emission rate (lbs/1,000 lbs) of coke burn-off. | Equations 1, 2, and 3 of § 63.1564 (if applicable). | |
| | c. Measure opacity of emissions. | Continuous opacity monitoring system. | You shall collect opacity monitoring data every 10 seconds during the entire period of the initial Method 5 performance test and reduce the data to 6-minute averages. |
| 3. Option 2: PM limit ..... | a. Measure PM emissions ..... | See item 2. of this table ..... | See item 2. of this table. |
| | b. Compute coke burn-off rate and PM emission rate. | Equations 1 and 2 of § 63.1564 | |

| | | | |
|---|---|---|---|
| *(Continued)* | | | |

**(Continued) TABLE 4 TO Subpart UUU OF PART 63**.—REQUIREMENTS FOR PERFORMANCE TESTS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS NOT SUBJECT TO THE NEW SOURCE PERFORMANCE STANDARD (NSPS) FOR PARTICULATE MATTER (PM)
[As stated in § 63.1564(b)(2), you shall meet each requirement in the following table that applies to you]

| For each new or existing catalytic cracking unit catalyst regenerator vent * * * | You shall * * * | Using * * * | According to these requirements * * * |
|---|---|---|---|
| | c. Establish your site-specific opacity operating limit if you use a continuous opacity monitoring system. | Data from the continuous opacity monitoring system. | You shall collect opacity monitoring data every 10 seconds during the entire period of the initial Method 5 performance test and reduce the data to 6-minute averages; determine and record the hourly average opacity from all the 6-minute averages; and compute the site-specific limit using Equation 4 of § 63.1564. |
| 4. Option 3: Ni lb/hr ..... | a. Measure concentration of Ni and total metal HAP. | Method 29 (40 CFR Part 60, Appendix A). | You shall maintain a sampling rate of at least 0.028 dscm/min (0.74 dscf/min). |
| | b. Compute Ni emission rate (lb/hr). | Equation 5 of § 63.1564 | |
| | c. Determine the equilibrium catalyst Ni concentration. | EPA Method 6010B or 6020 or EPA Method 7520 or 7521 in SW–846 [1]; or, you can use an alternative method satisfactory to the Administrator. | You shall obtain 1 sample for each of the 3 runs; determine and record the average equilibrium catalyst Ni concentration for each of the 3 runs; and you may adjust the results for an individual run to the maximum value using Equation 1 of § 63.1571. |
| | d. If you use a continuous opacity monitoring system, establish your site-specific Ni operating limit. | i. Equations 6 and 7 of § 63.1564 using data from continuous opacity monitoring system, gas flow rate, results of equilibrium catalyst Ni concentration analysis, and Ni emission rate from Method 29 test. | (1) You shall collect opacity monitoring data every 10 seconds during the entire period of the initial Ni performance test; reduce the data to 6-minute averages; and determine and record the hourly average opacity from all the 6-minute averages.<br><br>(2) You shall collect gas flow rate monitoring data every 15 minutes during the entire period of the initial Ni performance test; measure the gas flow as near as practical to the continuous opacity monitoring system; and determine and record the hourly average actual gas flow rate from all the readings. |
| 5. Option 4: Ni lbs/1,000 lbs of coke burn-off. | a. Measure concentration of Ni and total metal HAP. | Method 29 (40 CFR Part 60, Appendix A). | You shall maintain a sampling rate of at least 0.028 dscm/min (0.74 dscf/min). |
| | b. Compute Ni emission rate (lb/1,000 lbs of coke burn-off). | Equations 1 and 8 of § 63.1564. | |
| | c. Determine the equilibrium catalyst Ni concentration. | EPA Method 6010B or 6020 or EPA Method 7520 or 7521 | You shall obtain 1 sample for each of the 3 runs; determine and record the equilibrium catalyst Ni concentration for each of |

| | | | |
|---|---|---|---|
| *(Continued)* | | (SW–846) [1]; or, you can use an alternative method satisfactory to the Administrator. | the 3 samples; and you may adjust the laboratory results to the maximum value using Equation 2 of § 63.1571. |

**(Continued) TABLE 4 TO Subpart UUU OF PART 63**.—REQUIREMENTS FOR PERFORMANCE TESTS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS NOT SUBJECT TO THE NEW SOURCE PERFORMANCE STANDARD (NSPS) FOR PARTICULATE MATTER (PM)
[As stated in § 63.1564(b)(2), you shall meet each requirement in the following table that applies to you]

| For each new or existing catalytic cracking unit catalyst regenerator vent * * * | You shall * * * | Using * * * | According to these requirements * * * |
|---|---|---|---|
| | d. If you use a continuous opacity monitoring system, establish your site-specific Ni operating limit. | i. Equations 9 and 10 of § 63.1564 with data from continuous opacity monitoring system, coke burn-off rate, gas flow rate, results of equilibrium catalyst Ni concentration analysis, and Ni emission rate from Method 29 test. | (1) You shall collect opacity monitoring data every 10 seconds during the entire period of the initial Ni performance test; reduce the data to 6-minute averages; and determine and record the hourly average opacity from all the 6-minute averages.<br><br>(2) You shall collect gas flow rate monitoring data every 15 minutes during the entire period of the initial Ni performance test; measure the gas flow rate as near as practical to the continuous opacity monitoring system; and determine and record the hourly average actual gas flow rate from all the readings. |
| | e. Record the catalyst addition rate for each test and schedule for the 10-day period prior to the test. | | |
| 6. If you elect Option 2 in Entry 3 in Table 1, Option 3 in Entry 4 in Table 1, or Option 4 in Entry 5 in Table 1 of this Subpart And you use continuous parameter monitoring systems. | a. Establish each operating limit in Table 2 of this subpart that applies to you. | Data from the continuous parameter monitoring systems and applicable performance test methods. | |
| | b. Electrostatic precipitator or wet scrubber: gas flow rate. | Data from the continuous parameter monitoring systems and applicable performance test methods. | You shall collect gas flow rate monitoring data every 15 minutes during the entire period of the initial performance test; and determine and record the maximum hourly average gas flow rate from all the readings. |
| | c. Electrostatic precipitator: voltage and secondary current (or total power input). | Data from the continuous parameter monitoring systems and applicable performance test methods. | You shall collect voltage and secondary current (or total power input) monitoring data every 15 minutes during the entire period of the initial performance test; and determine and record the minimum hourly average voltage and secondary current (or total power input) from all the readings. |
| | d. Electrostatic precipitator or wet scrubber: equilibrium catalyst Ni concentration. | Results of analysis for equilibrium catalyst Ni concentration. | You shall determine and record the average equilibrium catalyst Ni concentration for the 3 runs based on the laboratory results. You may adjust the value using Equation 1 or 2 of § 63.1571 as applicable. |
| | e. Wet scrubber: pressure drop (not applicable to non-venturi scrubber of jet ejector design). | Data from the continuous parameter monitoring systems and applicable performance test methods | You shall collect pressure drop monitoring data every 15 minutes during the entire period of the initial performance test; and determine and record the minimum hourly average |

| | | | |
|---|---|---|---|
| *(Continued)* | | | pressure drop from all the readings. |

**(Continued) TABLE 4 TO Subpart UUU OF PART 63**.—REQUIREMENTS FOR PERFORMANCE TESTS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS NOT SUBJECT TO THE NEW SOURCE PERFORMANCE STANDARD (NSPS) FOR PARTICULATE MATTER (PM)
[As stated in § 63.1564(b)(2), you shall meet each requirement in the following table that applies to you]

| For each new or existing catalytic cracking unit catalyst regenerator vent * * * | You shall * * * | Using * * * | According to these requirements * * * |
|---|---|---|---|
| | f. Wet scrubber: liquid-to-gas ratio | Data from the continuous parameter monitoring systems and applicable performance test methods. | You shall collect gas flow rate and total water (or scrubbing liquid) flow rate monitoring data every 15 minutes during the entire period of the initial performance test; determine and record the hourly average gas flow rate and total water (or scrubbing liquid) flow rate from all the readings; and determine and record the minimum liquid-to-gas ratio |
| | g. Alternative procedure for gas flow rate. | Data from the continuous parameter monitoring systems and applicable performance test methods. | You shall collect air flow rate monitoring data or determine the air flow rate using control room instrumentation every 15 minutes during the entire period of the initial performance test; determine and record the hourly average rate of all the readings; and determine and record the maximum gas flow rate using Equation 1 of § 63.1573. |

**TABLE 5 TO Subpart UUU OF PART 63.**—INITIAL COMPLIANCE WITH METAL HAP EMISSION LIMITS FOR CATALYTIC CRACKING UNITS

[As stated in § 63.1564(b)(5), you shall meet each requirement in the following table that applies to you]

| For each new and existing catalytic cracking unit catalyst regenerator vent * * | For the following emission limit * * * | You have demonstrated initial compliance if * * * |
|---|---|---|
| 1. Subject to the NSPS for PM in 40 CFR 60.102. | PM emissions shall not exceed 1.0 kg/1,000 kg (1.0 lb/1,000 lb) of coke burn-off in the catalyst regenerator; if the discharged gases pass through an incinerator or waste heat boiler in which you burn auxiliary or supplemental liquid or solid fossil fuel, you shall limit the incremental rate of PM to no more than 43.0 grams per Megajoule (g/MJ) or 0.10 pounds per million British thermal units (lb/million Btu) of heat input attributable to the liquid or solid fossil fuel; and the opacity of emissions 30 percent, except for one 6-minute average opacity reading in any 1-hour period. | You have already conducted a performance test to demonstrate initial compliance with the NSPS and the measured PM emission rate is less than or equal to 1.0 kg/1,000 kg (1.0 lb/1,000 lb) of coke burn-off in the catalyst regenerator. As part of the Notification of Compliance Status, you shall certify that your vent meets the PM limit. You are not required to do another performance test to demonstrate initial compliance. If applicable, you have already conducted a performance test to demonstrate initial compliance with the NSPS and the measured PM rate is less than or equal to 43.0 g/MJ or 0.010 lb/million Btu of heat input attributable to the liquid or solid fossil fuel. As part of the Notification of Compliance Status, you shall certify that your vent meets the PM emission limit. You are not required to do another performance test to demonstrate initial compliance. You have already conducted a performance test to demonstrate initial compliance with the NSPS and the average hourly opacity of emissions is no more than 30 percent. Except: one 6-minute average in any 1-hour period can exceed 30 percent. As part of the Notification of Compliance Status, you shall certify that your vent meets the opacity limit. You are not required to do another performance test to demonstrate initial compliance. You have already conducted a performance evaluation to demonstrate initial compliance with the applicable performance specification. As part of your Notification of Compliance Status, you certify that your continuous opacity monitoring system meets the requirements in § 63.1572. You are not required to do a performance evaluation to demonstrate initial compliance. |
| 2. Option 1: Elect NSPS not subject to the NSPS for PM. | PM emissions shall not exceed 1.0 kg/1,000 kg (1.0 lb/1,000 lb) of coke burn-off in the catalyst regenerator; if the discharged gases pass through an incinerator or waste heat boiler in which you burn auxiliary or supplemental liquid or solid fossil fuel, you shall limit the incremental rate of PM to no more than 43.0 grams per Megajoule (g/MJ) or 0.10 pounds per million British thermal units (lb/million Btu) of heat input attributable to the liquid or solid fossil fuel; and the opacity of emissions shall not exceed 30 percent, except for one 6-minute average opacity reading in any 1-hour period. | The average PM emission rate, measured using EPA method 5 over the period of the initial performance test, is no higher than 1.0 kg/1,000 kg (1.0 lb/1,000 lbs) of coke burn-off in the catalyst regenerator. The PM emission rate is calculated using Equations 1 and 2 of the § 63.1564. If applicable, the average PM emission rate, measured using EPA Method 5 over the period of the initial performance test, is no higher than 43.0 g/MJ or 0.010 lb/million Btu of heat input attributable to the liquid or solid fossil fuel. The PM emission rate is calculated using Equation 3 of § 63.1564; no more than one 6-minute average measured by the continuous opacity monitoring system exceeds 30 percent opacity in any 1-hour period over the period of the performance test; and your performance evaluation shows the |

| | | |
|---|---|---|
| *(Continued on next page)* | | continuous opacity monitoring system meets the applicable requirements in § 63.1572. |

**(Cont.) TABLE 5 TO Subpart UUU OF PART 63.**—INITIAL COMPLIANCE WITH METAL HAP EMISSION LIMITS FOR CATALYTIC CRACKING UNITS

[As stated in § 63.1564(b)(5), you shall meet each requirement in the following table that applies to you]

| For each new and existing catalytic cracking unit catalyst regenerator vent * * | For the following emission limit * * * | You have demonstrated initial compliance if * * * |
|---|---|---|
| 3. Option 2: not subject to the NSPS for PM ..... | PPM emissions shall not exceed 1.0 kg/1,000 kg (1.0 lb/1,000 lb) of coke burn-off in the catalyst regenerator. | The average PM emission rate, measured using EPA Method 5 over the period of the initial performance test, is less than or equal to 1.0 kg/1,000 kg (1.0 lb/1,000 lbs) of coke burn-off in the catalyst regenerator. The PM emission rate is calculated using Equations 1 and 2 of § 63.1564; and if you use a continuous opacity monitoring system, your performance evaluation shows the system meets the applicable requirements in § 63.1572. |
| 4. Option 3: not subject to the NSPS for PM ..... | Nickel (Ni) emissions from your catalyst regenerator vent shall not exceed 13,000 mg/hr (0.029 lb/hr). | The average Ni emission rate, measured using Method 29 over the period of the initial performance test, is not more than 13,000 mg/hr (0.029 lb/hr). The Ni emission rate is calculated using Equation 5 of § 63.1564; and if you use a continuous opacity monitoring system, your performance evaluation shows the system meets the applicable requirements in § 63.1572. |
| 5. Option 4: Ni lb/1,000 lbs of coke burn-off not subject to the NSPS for PM. | Ni emissions from your catalyst regenerator vent shall not exceed 1.0 mg/kg (0.001 lb/1,000 lbs) of coke burn-off in the catalyst regenerator. | The average Ni emission rate, measured using Method 29 over the period of the initial performance test, is not more than 1.0 mg/kg (0.001 lb/1,000 lbs) of coke burn-off in the catalyst regenerator. The Ni emission rate is calculated using Equation 8 of § 63.1564; and if you use a continuous opacity monitoring system, your performance evaluation shows the system meets the applicable requirements in § 63.1572. |

**TABLE 6 TO Subpart UUU OF PART 63.**—CONTINUOUS COMPLIANCE WITH METAL HAP EMISSION LIMITS FOR CATALYTIC CRACKING UNITS

[As stated in § 63.1564(c)(1), you shall meet each requirement in the following table that applies to you]

| For each new and existing catalytic cracking unit * * * | Subject to this emission limit for your catalyst regenerator vent * * * | You shall demonstrate continuous compliance by * * * |
|---|---|---|
| 1. Subject to the NSPS for PM in 40 CFR 60.102. | a. PM emissions shall not exceed 1.0 lb/ 1,000 lbs of coke burn-off in the catalyst regenerator; if the discharged gases pass through an incinerator or waste heat boiler in which you burn auxiliary or supplemental liquid or solid fossil fuel, incremental rate of PM can't exceed 43.0 g/MJ (0.10 lb/million Btu) of heat input attributable to the liquid or solid fossil fuel; and opacity of emissions can't exceed 30 percent, except for one 6-minute average opacity reading in any 1-hour period. | i. Determining and recording each day the average coke burn-off rate (thousands of kilograms per hour) using Equation 2 in § 63.1564 and the hours of operation for each catalyst regenerator; maintaining PM emission rate below 1.0 kg/1,000 kg (1.0 lb/ 1,000 lbs) of coke burn-off; if applicable, determining and recording each day the rate of combustion of liquid or solid fossil fuels (liters/hour or kilograms/hour) using Equation 3 of § 63.1564 and the hours of operation during which liquid or solid fossil fuels are combusted in the incinerator waste heat boiler; if applicable, maintaining PM rate below 43 g/MJ (0.10 lb/million Btu) of heat input attributable to the solid or liquid fossil fuel; collecting the continuous opacity monitoring data for each catalyst regenerator vent according to § 63.1572; and maintaining each 6-minute average at or below 30 percent except that one 6-minute average during a 1-hour period can exceed 30 percent. |
| 2. Option 1: Elect NSPS not subject to the NSPS for PM in 40 CFR 60.102. | See item 1.a. of this table ..... | See item 1.a.i. of this table. |
| 3. Option 2: PM limit not subject to the NSPS for PM. | PM emissions shall not exceed 1.0 lb/1,000 lbs of coke burn-off in the catalyst regenerator. | Determining and recording each day the average coke burn-off rate (thousands of kilograms per hour) and the hours of operation for each catalyst regenerator by Equation 2 of § 63.1564. You can use process data to determine the volumetric flow rate; and maintaining PM emission rate below 1.0 kg/ 1,000 kg (1.0 lb/1,000 lbs) of coke burn-off. |
| 4. Option 3: Ni lb/hr not subject to the NSPS for PM. | Ni emissions shall not exceed 13,000 mg/hr (0.029 lb/hr). | Maintaining Ni emission rate below 13,000 mg/hr (0.029 lb/hr). |
| 5. Option 4: Ni lb/1,000 lbs of coke burn-off not subject to the NSPS for PM. | Ni emissions shall not exceed 1.0 mg/kg (0.001 lb/1,000 lbs) of coke burn-off in the catalyst regenerator. | Determining and recording each day the average coke burn-off rate (thousands of kilograms per hour) and the hours of operation for each catalyst regenerator by Equation 2 of § 63.1564. You can use process data to determine the volumetric flow rate; and maintaining Ni emission rate below 1.0 mg/ kg (0.001 lb/1,000 lbs) of coke burn-off in the catalyst regenerator. |

**TABLE 7 TO Subpart UUU OF PART 63.**—CONTINUOUS COMPLIANCE WITH OPERATING LIMITS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS

[As stated in § 63.1564(c)(1), you shall meet each requirement in the following table that applies to you]

| For each new or existing catalytic cracking unit * * * | If you use * * * | For this operating limit * * * | You shall demonstrate continuous compliance by * * * |
|---|---|---|---|
| 1. Subject to NSPS for PM in 40 CFR 60.102. | Continuous opacity monitoring system. | Not applicable ..... | Complying with Table 6 of this subpart. |
| 2. Option 1: Elect NSPS not subject to the NSPS for PM in 40 CFR 60.102. | Continuous opacity monitoring system. | Not applicable ..... | Complying with Table 6 of this subpart. |
| 3. Option 2: PM limit not subject to the NSPS for PM in 40 CFR 60.102. | a. Continuous opacity monitoring system. | The opacity of emissions from your catalyst regenerator vent shall not exceed the site-specific opacity operating limit established during the performance test | Collecting the hourly average continuous opacity monitoring system data according to § 63.1572; and maintaining each 6-minute average in each 1-hour period at or below the site-specific limit. |
| | b. Continuous parameter monitoring systems—electrostatic precipitator. | i. The daily average gas flow rate to the control device shall not exceed the operating limit established during the performance test. | Collecting the hourly and daily average gas flow rate monitoring data according to § 63.1572 [1]; and maintaining the daily average gas flow rate at limit or below the established during the performance test. |
| | | ii. The daily average voltage and secondary current (or total power input) to the control device shall not fall below the operating limit established during the performance test | Collecting the hourly and daily average voltage and secondary current (or total power input) monitoring data according to § 63.1572; and maintaining the daily average voltage and secondary current (or total power input) at or above the limit established during the performance test. |
| | c. Continuous parameter monitoring systems—wet scrubber. | i. The daily average pressure drop across the scrubber shall not fall below the operating limit established during the performance test. | Collecting the hourly and daily average pressure drop monitoring data according to § 63.1572; and maintaining the daily average press drop above the limit established during the performance test. |
| | | ii. The daily average liquid-to-gas ratio shall not fall below the operating limit established during the performance test. | Collecting the hourly average gas flow rate and water (or scrubbing liquid) flow rate monitoring data according to § 63.1572[1]; determining and recording the hourly average liquid-to-gas ratio; determining and recording the daily average liquid-to-gas ratio; and maintaining the daily average liquid-to-gas ratio above the limit established during the performance test. |

*(Continued on next page)*

**(Cont.) TABLE 7 TO Subpart UUU OF PART 63**.—CONTINUOUS COMPLIANCE WITH OPERATING LIMITS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS

[As stated in § 63.1564(c)(1), you shall meet each requirement in the following table that applies to you]

| For each new or existing catalytic cracking unit * * * | If you use * * * | For this operating limit * * * | You shall demonstrate continuous compliance by * * * |
|---|---|---|---|
| 4. Option 3: Ni lb/hr not subject to the NSPS for PM in 40 CFR 60.102. | a. Continuous opacity monitoring system. | The daily average Ni operating value shall not exceed the site-specific Ni operating limit established during the performance test. | Collecting the hourly average continuous opacity monitoring system data according § 63.1572; determining and recording equilibrium catalyst Ni concentration at least once a week collecting the hourly average gas flow rate monitoring data according to § 63.1572[1]; determining and recording the hourly average Ni operating value using Equation 11 of § 63.1564; determining and recording the daily average Ni operating value; and maintaining the daily average Ni operating value below the site-specific Ni operating limit established the performance test. |
| | b. Continuous parameter monitoring systems—electrostatic precipitator. | i. The daily average gas flow rate to the control device shall notice exceed the level established in the performance test. | See item 3.b.i. of this table. |
| | | ii. The daily average voltage and secondary current (or total power input) shall not fall below the level established in the performance test. | See item 3.b.ii. of this table. |
| | | iii. The monthly rolling average of equilibrium catalyst Ni concentration shall not exceed the level established during the performance test. | Determining the recording the equilibrium catalyst Ni concentration at least once a week; determining and recording the monthly rolling average of the equilibrium catalyst Ni concentration once each week using the weekly or most recent value; and maintaining the monthly rolling average below the limit established in the performance test |
| | c. Continuous parameter monitoring systems—wet scrubber. | i. The daily average pressure drop shall not fall below the operating limit established in the performance test. | See item 3.c.i. of this table. |
| | | ii. The daily average liquid-to-gas ratio shall not fall below the operating limit established during the performance test. | See item 3.c.ii. of this table. |
| | | iii. The monthly rolling average equilibrium catalyst Ni concentration shall not exceed the level established during the performance test. | Determining and recording the equilibrium catalyst Ni concentration at least once a week; determining and recording the monthly rolling average of equilibrium catalyst Ni concentration once each week using the weekly or most recent value; and maintaining the monthly rolling average below the limit established in the performance test. |

*(Continued on next page)*

**(Cont.) TABLE 7 TO Subpart UUU OF PART 63**.—CONTINUOUS COMPLIANCE WITH OPERATING LIMITS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS
[As stated in § 63.1564(c)(1), you shall meet each requirement in the following table that applies to you

| For each new or existing catalytic cracking unit * * * | If you use * * * | For this operating limit * * * | You shall demonstrate continuous compliance by * * * |
|---|---|---|---|
| 5. Option 4: Ni lb/ton of coke burnoff not subject to the NSPS for PM in 40 CFR 60.102 | a. Continuous opacity monitoring system. | The daily average Ni operating value shall not exceed the site specific Ni operating limit established during the performance test. | Collecting the hourly average continuous opacity monitoring system data according to § 63.1572; collecting the hourly average gas flow rate monitoring data according to § 63.1572 [1]; determining and recording equilibrium catalyst Ni concentration at least once a week; determining and recording the hourly average Ni operating value using Equation 12 of § 63.1564; determining and recording the daily average Ni operating value; and maintaining the daily average Ni operating value below the site-specific Ni operating limit established during the performance test. |
| | b. Continuous parameter monitoring systems—electrostatic precipitator. | i. The daily average gas flow rate to the control device shall not exceed the level established in the performance test. | See item 3.b.i. of this table. |
| | | ii. The daily average voltage and secondary current (or total power input) shall not fall below the level established in the performance test. | See item 3.b.ii. of this table. |
| | | iii. The monthly rolling average equilibrium catalyst Ni concentration shall not exceed the level established during the performance test. | See item 4.b.iii. of this table. |
| | c. Continuous parameter monitoring systems—wet scrubber. | i. The daily average pressure drop shall not fall below the operating limit established in the performance test. | See item 3.c.i. of this table. |
| | | ii. The daily average liquid-to-gas ratio shall not fall below the operating limit established during the performance test. See item 3.c.ii. of this table. | |
| | | iii. The monthly rolling average equilibrium catalyst Ni concentration shall not exceed the level established during the performance test. | See item 4.c.iii. of this table. |

1 If applicable, you can use the alternative in § 63.1573 for gas flow rate instead of a continuous parameter monitoring system if you used the alternative method in the initial performance test. If so, you shall continuously monitor and record the air flow rate to the regenerator and the temperature of the gases entering the control device as described in § 63.1573. You shall determine and record the hourly average gas flow rate using Equation 1 of § 63.1573 and the daily average gas flow rate. You shall maintain the daily average gas flow rate below the operating limit established during the performance test.

**TABLE 8 TO Subpart UUU OF PART 63.**—ORGANIC HAP EMISSION LIMITS FOR CATALYTIC CRACKING UNITS

[As stated in § 63.1565(a)(1), you shall meet each emission limitation in the following table that applies to you]

| For each new and existing catalytic cracking unit * * * | You shall meet the following emission limit for each catalyst regenerator vent * * * |
|---|---|
| 1. Subject to the NSPS for carbon monoxide (CO) in 40 CFR 60.103. | CO emissions from the catalyst regenerator vent or CO boiler serving the catalytic cracking unit shall not exceed 500 parts per million volume (ppmv) (dry basis). |
| 2. Not subject to the NSPS for CO in 40 CFR 60.103. | a. CO emissions from the catalyst regenerator vent or CO boiler serving the catalytic cracking unit shall not exceed 500 ppmv (dry basis).<br><br>b. If you use a flare to meet the CO limit, the flare shall meet the requirements for control devices in § 63.11(b): visible emissions shall not exceed a total of 5 minutes during any 2 consecutive hours. |

**TABLE 9 TO Subpart UUU OF PART 63.**—OPERATING LIMITS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC CRACKING UNITS

[As stated in § 63.1565(a)(2), you shall meet each operating limit in the following table that applies to you]

| For each new or existing catalytic cracking unit * * * | For this type of continuous monitoring system * * * | For this type of control device * * * | You shall meet this operating limit * * * |
|---|---|---|---|
| 1. Subject to the NSPS for carbon monoxide (CO) in 40 CFR 60.103. | Continuous emission monitoring system. | Not applicable ..... | Not applicable. |
| 2. Not subject to the NSPS for CO in 40 CFR 60.103. | | Not applicable ..... | Not applicable. |
| | a. Continuous emission monitoring system.<br><br>b. Continuous parameter monitoring systems. | i. Thermal incinerator ..... | Maintain the daily average combustion zone temperature above the limit established during the performance test; and maintain the daily average oxygen concentration in the vent stream (percent, dry basis) above the limit established during the performance test. |
| | | ii. Boiler or process heater with a design heat input capacity under 44 MW or a boiler or process heater in which all vent streams are not introduced into the flame zone. | Maintain the daily average combustion zone temperature above the limit established in the performance test. |
| | | iii. Flare ..... | The flare pilot light shall be present at all times and the flare shall be operating at all times that emissions may be vented to it. |

**TABLE 10 TO Subpart UUU OF PART 63.**—CONTINUOUS MONITORING SYSTEMS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC CRACKING UNITS—Continued

[As stated in § 63.1565(b)(1), you shall meet each requirement in the following table that applies to you]

| For each new or existing catalytic cracking unit * * * | And you use this type of control device for your vent * * * | You shall install, operate, and maintain this type of continuous monitoring system * * * |
|---|---|---|
| 1. Subject to the NSPS for carbon monoxide (CO) in 40 CFR 60.103. | Not applicable ..... | Continuous emission monitoring system to measure and record the concentration by volume (dry basis) of CO emissions from each catalyst regenerator vent. |
| 2. Not subject to the NSPS for CO in 40 CFR 60.103. | a. Thermal incinerator ..... | Continuous emission monitoring system to measure and record the concentration by volume (dry basis) of CO emissions from each catalyst regenerator vent; or continuous parameter monitoring systems to measure and record the combustion zone temperature and oxygen content (percent, dry basis) in the incinerator vent stream. |
| | b. Process heater or boiler with a design heat input capacity under 44 MW or process heater or boiler in which all vent streams are not introduced into the flame zone. | Continuous emission monitoring system to measure and record the concentration by volume (dry basis) of CO emissions from each catalyst regenerator vent; or continuous parameter monitoring systems to measure and record the combustion zone temperature. |
| | c. Flare ..... | Monitoring device such as a thermocouple, an ultraviolet beam sensor, or infrared sensor to continuously detect the presence of a pilot flame. |
| | d. No control device ..... | Continuous emission monitoring system to measure and record the concentration by volume (dry basis) of CO emissions from each catalyst regenerator vent. |

**TABLE 11 TO Subpart UUU OF PART 63**.—REQUIREMENTS FOR PERFORMANCE TESTS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC CRACKING UNITS NOT SUBJECT TO NEW SOURCE PERFORMANCE STANDARD (NSPS) FOR CARBON MONOXIDE (CO)

[As stated in § 63.1565(b)(2) and (3), you shall meet each requirement in the following table that applies to you]

| For * * * | You shall * * * | Using * * * | According to these requirements* * |
|---|---|---|---|
| 1. Each new or existing catalytic cracking unit catalyst regenerator vent. | a. Select sampling port's location and the number of traverse ports. | Method 1 or 1A in Appendix A to part 60 of this chapter. | Sampling sites shall be located at the outlet of the control device or the outlet of the regenerator, as applicable, and prior to any releases to the atmosphere. |
| | b. Determine velocity and volumetric flow rate. | Method 2, 2A, 2D, 2F, or 2G in Appendix A to part 60 of this chapter, as applicable. | |
| | c. Conduct gas molecular weight analysis. | Method 3, 3A, or 3B in appendix A to part 60 of this chapter, as applicable. | |
| | d. Measure moisture content of the stack gas. | Method 4 in Appendix A to part 60 of this chapter. | |
| 2. For each new or existing catalytic cracking unit catalyst regenerator vent if you use a continuous emission monitoring system. | Measure CO emissions ..... | Data from your continuous emission monitoring system. | Collect CO monitoring data for each vent for 24 consecutive operating hours; and reduce the continuous emission monitoring data to 1-hour averages computed from four or more data points equally spaced over each 1-hour period. |
| 3. Each catalytic cracking unit catalyst regenerator vent if you use continuous parameter monitoring systems. | a. Measure the CO concentration (dry basis) of emissions exiting the control device. | Method 10, 10A, or 10B in appendix A to part 60 of this chapter, as applicable. | |
| | b. Establish each operating limit in Table 9 of this subpart that applies to you. | Data from the continuous parameter monitoring systems. | |
| | c. Thermal incinerator combustion zone temperature. | Data from the continuous parameter monitoring systems. | Collect temperature monitoring data every 15 minutes during the entire period of the CO initial performance test; and determine and record the minimum hourly average combustion zone temperature from all the readings. |
| | d. Thermal incinerator: oxygen, content (percent, dry basis) in the incinerator vent stream. | Data from the continuous parameter monitoring systems. | Collect oxygen concentration (percent, dry basis) monitoring data every 15 minutes during the entire period of the CO initial performance test; and determine and record the minimum hourly average percent excess oxygen concentration from all the readings. |
| | e. If you use a process heater or boiler with a design heat input capacity under 44 MW or process heater or boiler in which all vent streams are not introduced into the flame zone, establish operating limit for combustion zone temperature. | Data from the continuous parameter monitoring systems. | Collect the temperature monitoring data every 15 minutes during the entire period of the CO initial performance test; and determine and record the minimum hourly average combustion zone temperature from all |

| | | | |
|---|---|---|---|
| *(Continued on next page)* | temperature. | | the readings. |

**(Continued) TABLE 11 TO Subpart UUU OF PART 63**.—REQUIREMENTS FOR PERFORMANCE TESTS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC CRACKING UNITS NOT SUBJECT TO NEW SOURCE PERFORMANCE STANDARD (NSPS) FOR CARBON MONOXIDE (CO)

[As stated in § 63.1565(b)(2) and (3), you shall meet each requirement in the following table that applies to you]

| For * * * | You shall * * * | Using * * * | According to these requirements * * * |
|---|---|---|---|
| | f. If you use a flare, conduct visible emission observations. | Method 22 (40 CFR Part 60, appendix A). | Maintain a 2-hour observation period; and record the presence of a flame at the pilot light over the full period of the test. |
| | g. If you use a flare, determine that the flare meets the requirements for net heating value of the gas being combusted and exit velocity. | 40 CFR 60.11(b)(6)through(8). | |

**TABLE 12 TO Subpart UUU OF PART 63.**—INITIAL COMPLIANCE WITH ORGANIC HAP EMISSION LIMITS FOR CATALYTIC CRACKING UNITS

[As stated in § 63.1565(b)(4), you shall meet each requirement in the following table that applies to you]

| For each new and existing catalytic cracking unit * * * | For the following emission limit * * * | You have demonstrated initial compliance if * * * |
|---|---|---|
| 1. Subject to the NSPS for carbon monoxide (CO) in 40 CFR 60.103. | CO emissions from your catalyst regenerator vent or CO boiler serving the catalytic cracking unit shall not exceed 500 ppmv (dry basis). | You have already conducted a performance test to demonstrate initial compliance with the NSPS and the measured CO emissions are less than or equal to 500 ppm (dry basis). As part of the Notification of Compliance Status, you shall certify that your vent meets the CO limit. You are not required to conduct another performance test to demonstrate initial compliance. You have already conducted a performance evaluation to demonstrate initial compliance with the applicable performance specification. As part of your Notification of Compliance Status, you shall certify that your continuous emission monitoring system meets the applicable requirements in § 63.1572. You are not required to conduct another performance evaluation to demonstrate initial compliance. |
| 2. Not subject to the NSPS for CO in 40 CFR 60.103. | a. CO emissions from your catalyst regenerator vent or CO boiler serving the catalytic cracking unit shall not exceed 500 ppmv (dry basis). | i. If you use a continuous parameter monitoring system, the average CO emissions measured by Method 10 over the period of the initial performance test are less than or equal to 500 ppmv (dry basis).<br><br>ii. If you use a continuous emission monitoring system, the hourly average CO emissions over the 24-hour period for the initial performance test are not more than 500 ppmv (dry basis); and your performance evaluation shows your continuous emission monitoring system meets the applicable requirements in § 63.1572. |
| | b. If you use a flare, visible emissions shall not exceed a total of 5 minutes during any 2 operating hours. | Visible emissions, measured by Method 22 during the 2-hour observation period during the initial performance test, are no higher than 5 minutes. |

**TABLE 13 TO Subpart UUU OF PART 63**—CONTINUOUS COMPLIANCE WITH ORGANIC HAP EMISSION LIMITS FOR CATALYTIC CRACKING UNITS

[As stated in § 63.1565(c)(1), you shall meet each requirement in the following table that applies to you]

| For each new and existing catalytic cracking unit * * ;* | Subject to this emission limit for your catalyst regenerator vent * * * | If you shall * * * | You shall demonstrate continuous compliance by * * * |
|---|---|---|---|
| 1. Subject to the NSPS for carbon monoxide (CO) in 40 CFR 60.103. | CO emissions from your catalyst regenerator vent or CO boiler serving the catalytic cracking unit shall not exceed 500 ppmv (dry basis). | Continuous emission monitoring system. | Collecting the hourly average CO monitoring data according to § 63.1572; and maintaining the hourly average CO concentration at or below 500 ppmv (dry basis). |
| 2. Not subject to the NSPS for CO in 40 CFR 60.103. | i. CO emissions from your catalyst regenerator vent or CO boiler serving the catalytic cracking unit shall not exceed 500 ppmv (dry basis). | Continuous emission monitoring system. | Same as above. |
| | ii. CO emissions from your catalyst regenerator vent or CO boiler serving the catalytic cracking unit shall not exceed 500 ppmv (dry basis). | Continuous parameter monitoring system. | Maintaining the hourly average CO concentration below 500 ppmv (dry basis). |
| | iii. Visible emissions from a flare shall not exceed a total of 5 minutes during any 2-hour period. | Control device-flare ..... | Maintaining visible emissions below a total of 5 minutes during any 2-hour operating period. |

**TABLE 14 TO Subpart UUU OF PART 63**—CONTINUOUS COMPLIANCE WITH OPERATING LIMITS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC CRACKING UNITS

[As stated in § 63.1565(c)(1), you shall meet each requirement in the following table that applies to you]

| For each new existing catalytic cracking unit * * * | If you use * * * | For this operating limit * * * | You shall demonstrate continuous compliance by * * * |
|---|---|---|---|
| 1. Subject to NSPS for carbon monoxide (CO) in 40 CFR 60.103. | Continuous emission monitoring system. | Not applicable ..... | Complying with Table 13 of this subpart. |
| 2. Not subject to the NSPS for CO in 40 CFR 60.103. | a. Continuous emission monitoring system. | Not applicable ..... | Complying with Table 13 of this subpart. |
| | b. Continuous parameter monitoring systems—thermal incinerator. | i. The daily average combustion zone temperature shall not fall below the level established during the performance test. | Collecting the hourly and daily average temperature monitoring data according to § 63.1572; and maintaining the daily average combustion zone temperature above the limit established during the performance test. |
| | | ii. The daily average oxygen concentration in the vent stream (percent, dry basis) shall not fall below the level established during the performance test. | Collecting the hourly and daily average oxygen concentration monitoring data according to § 63.1572; and maintaining the daily average oxygen concentration above the limit established during the performance test. |
| | c. Continuous parameter monitoring systems—boiler or process heater with a design heat input capacity under 44 MW or boiler or process heater in which all vent streams are not introduced into the flame zone. | The daily combustion zone temperature shall not fall below the level established in the performance test. | Collecting the average hourly and daily temperature monitoring data according to § 63.1572; and maintaining the daily average combustion zone temperature above the limit established during the performance test. |
| | d. Continuous parameter monitoring system—flare. | The flare pilot light shall be present at all times and the flare shall be operating at all times that emissions may be vented to it. | Collecting the flare monitoring data according to § 63.1572; and recording for each 1-hour period whether the monitor was continuously operating and the pilot light was continuously present during each 1-hour period. |

### TABLE 36 TO Subpart UUU OF PART 63.—WORK PRACTICE STANDARDS FOR HAP EMISSIONS FROM BYPASS LINES

[As stated in § 63.1569(a)(1), you shall meet each work practice standard in the following table that applies to you]

| Option | You shall meet one of these equipment standards * * * |
|---|---|
| 1. Option 1 ..... | Install and operate a device (including a flow indicator, level recorder, or electronic valve position monitor) to continuously detect, at least every hour, whether flow is present in the bypass line. Install the device at or as near as practical to the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere. |
| 2. Option 2 ..... | Install a car-seal or lock-and-key device placed on the mechanism by which the bypass device flow position is controlled (e.g., valve handle, damper level) when the bypass device is in the closed position such that the bypass line valve cannot be opened without breaking the seal or removing the device. |
| 3. Option 3 ..... | Seal the bypass line by installing a solid blind between piping flanges. |
| 4. Option 4 ..... | Vent the bypass line to a control device that meets the appropriate requirements in this subpart. |

### TABLE 37 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS FOR BYPASS LINES

[As stated in § 63.1569(b)(1), you shall meet each requirement in the following table that applies to you]

| For this standard . . . | You shall . . . |
|---|---|
| 1. Option 1: Install and operate a flow indicator, level recorder, or electronic valve position monitor. | Record during the performance test for each type of control device whether the flow indicator, level recorder, or electronic valve position monitor was operating and whether flow was detected at any time during each hour of level the three runs comprising the performance test. |

### TABLE 38 TO Subpart UUU OF PART 63.—INITIAL COMPLIANCE WITH WORK PRACTICE STANDARDS FOR HAP EMISSIONS FROM BYPASS LINES

[As stated in § 63.1569(b)(2), you shall meet each requirement in the following table that applies to you]

| For * * * | For this work practice standard * * * | You have demonstrated initial compliance if * * * |
|---|---|---|
| 1. Each new or existing bypass line associated with a catalytic cracking unit, catalytic reforming unit, or sulfur recovery unit. | a. Option 1: Install and operate a device (including a flow indicator, level recorder, or electronic valve position monitor) to continuously detect, at least every hour, whether flow is present in the bypass line. Install the device at or as near as practical to the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere. | The installed equipment operates properly during each run of the performance test and no flow is present in the line during the test. |
| | b. Option 2: Install a car-seal or lock-and-key device placed on the mechanism by which the bypass device flow position is controlled (e.g., valve handle, damper level) when the bypass device is in the closed position such that the bypass line valve cannot be opened without breaking the seal or removing the device. | As part of the notification of compliance status, you certify that you installed the equipment, the equipment was operational by your compliance date, and you identify what equipment was installed. |
| | c. Option 3: Seal the bypass line by installing a solid blind between piping flanges. | See item 1.b. of this table. |
| | d. Option 4: Vent the bypass line to a control device that meets the appropriate requirements | See item 1.b. of this table. |

| | | |
|---|---|---|
| | in this subpart. | |

**TABLE 39 TO Subpart UUU OF PART 63.**—CONTINUOUS COMPLIANCE WITH WORK PRACTICE STANDARDS FOR HAP EMISSIONS FROM BYPASS LINES

[As stated in § 63.1569(c)(1), you shall meet each requirement in the following table that applies to you]

| If you elect this standard * * * | You shall demonstrate continuous compliance by * * * |
|---|---|
| 1. Option 1: Flow indicator, level recorder, or electronic valve position monitor. | Continuously monitoring and recording whether flow is present in the bypass line; visually inspecting the device at least once every hour if the device is not equipped with a recording system that provides a continuous record; and recording whether the device is operating properly and whether flow is present in the bypass line. |
| 2. Option 2: Car-seal or lock-and-key device ..... | Visually inspecting the seal or closure mechanism at least once every month; and recording whether the bypass line valve is maintained in the closed position and whether flow is present in the line. |
| 3. Option 3: Solid blind flange ..... | Visually inspecting the blind at least once a month; and recording whether the blind is maintained in the correct position such that the vent stream cannot be diverted through the bypass line. |
| 4. Option 4: Vent to control device ..... | Monitoring the control device according to appropriate subpart requirements. |
| 5. Option 1, 2, 3, or 4 ..... | Recording and reporting the time and duration of any bypass. |

**TABLE 40 TO Subpart UUU OF PART 63.**—REQUIREMENTS FOR INSTALLATION, OPERATION, AND MAINTENANCE OF CONTINUOUS OPACITY MONITORING SYSTEMS AND CONTINUOUS EMISSION MONITORING SYSTEMS

[As stated in § 63.1572(a)(1) and (b)(1), you shall meet each requirement in the following table that applies to you]

| This type of continuous opacity or emission monitoring system * * * | Shall meet these requirements * * * |
|---|---|
| 1. Continuous opacity monitoring system ..... | Performance specification 1 (40 CFR Part 60, Appendix B). |
| 2. CO continuous emission monitoring system ..... | Performance specification 4 (40 CFR Part 60, Appendix B); span value of 1,000 ppm; and procedure 1 (40 CFR Part 60, Appendix F) except relative accuracy test audits are required annually instead of quarterly. |
| 3. CO continuous emission monitoring system used to demonstrate emissions average under 50 ppm (dry basis). | Performance specification 4 (40 CFR Part 60, Appendix B); and span value of 100 ppm. |
| 4. $SO_2$ continuous emission monitoring for sulfur recovery unit with oxidation control system or reduction control system; this monitor shall include an $O_2$ monitor for correcting the data for excess air. | Performance specification 2 (40 CFR Part 60, Appendix B); span values of 500 ppm $SO_2$ and 10 percent $O_2$; use Methods 6 or 6C and 3A or 3B (40 CFR Part 60, Appendix A) for certifying $O_2$ monitor; and procedure 1 (40 CFR Part 60, Appendix F) except relative accuracy test audits are required annually instead of quarterly. |
| 5. Reduced sulfur and $O_2$ continuous emission monitoring system for sulfur recovery unit with reduction control system not followed by incineration; this monitor shall include an $O_2$ monitor for correcting the data for excess air unless exempted. | Performance specification 5 (40 CFR Part 60, Appendix B), except calibration drift specification is 2.5 percent of the span value instead of 5 percent; 450 ppm reduced sulfur and 10 percent $O_2$; use Methods 15 or 15A and 3A or 3B (40 CFR Part 60, Appendix A) for certifying $O_2$ monitor; if Method 3A or 3B yields $O_2$ concentrations below 0.25 percent during the performance evaluation, the $O_2$ concentration can be assumed to be zero and the $O_2$ monitor is not required; and procedure 1 (40 CFR Part 60, Appendix F), except relative accuracy test audits, are required annually instead of quarterly. |
| 6. Instrument with an air or O2 dilution and oxidation system to convert reduced sulfur to $SO_2$ for continuously monitoring the concentration of $SO_2$ instead of reduced sulfur monitor and $O_2$ monitor. | Performance specification 5 (40 CFR Part 60, Appendix B); span value of 375 ppm $SO_2$ and 10 percent $O_2$; use Methods 15 or 15A and 3A or 3B for certifying $O_2$ monitor; and procedure 1 (40 CFR part 60, Appendix F), except relative accuracy test audits, are required annually instead of quarterly. |
| 7. TRS continuous emission monitoring system for sulfur recovery unit; this monitor shall include an $O_2$ monitor for correcting the data for excess air. | Performance specification 5 (40 CFR Part 60, Appendix B). |
| 8. $O_2$ monitor for oxygen concentration ..... | If necessary due to interferences, locate the oxygen sensor prior to the introduction of any outside gas stream; performance specification 3 (40 CFR Part 60, Appendix B; span value for $O_2$ sensor is 10 percent; and procedure 1 (40 CFR Part 60, Appendix F), except relative accuracy test audits, are required annually instead of quarterly. |

**TABLE 41 TO Subpart UUU OF PART 63.**—REQUIREMENTS FOR INSTALLATION, OPERATION, AND MAINTENANCE OF CONTINUOUS PARAMETER MONITORING SYSTEMS—Continued

[As stated in § 63.1572(c)(1), you shall meet each requirement in the following table that applies to you]

| If you use a continuous parameter monitoring system to measure and record * * * | You shall * * * |
|---|---|
| 1. Voltage and secondary current or total power input. | At least monthly, inspect all components of the continuous parameter monitoring system for integrity and all electrical connections for continuity; and record the results of each inspection. |
| 2. Pressure drop [1] ..... | Locate the pressure sensor(s) in a position that provides a representative measurement of the pressure; minimize or eliminate pulsating pressure, vibration, and internal and external corrosion; use a gauge with an accuracy ± 2 percent over the operating range; check pressure tap for plugs at least once a week; using a manometer, check gauge calibration quarterly and transducer calibration monthly; for a semi-regenerative catalytic reforming unit, you can check the calibration quarterly and monthly or prior to regeneration, whichever is longer; record the results of each calibration; conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range, or install a new pressure sensor; at least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage; and record the results of each inspection. |
| 3. Air flow rate, gas flow rate, or total water (or scrubbing liquid) flow rate. | Locate the flow sensor(s) and other necessary equipment such as straightening vanes in a position that provides representative flow; use a flow rate sensor with an accuracy within ±5 percent; reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances; conduct a flow sensor calibration check at least semiannually; for a semi-regenerative catalytic reforming unit, you can check the calibration at least semiannually or prior to regeneration, whichever is longer; record the results of each calibration; if you elect to comply with Option 3 (Ni lb/hr) or Option 4 (Ni lb/1,000 lbs of coke burn-off) for the HAP metal emission limitations in § 63.1564, install the continuous parameter monitoring system for gas flow rate as close as practical to the continuous opacity monitoring system; and if you don't use a continuous opacity monitoring system, install the continuous parameter monitoring system for gas flow rate as close as practical to the control device. |
| 4. Combustion zone temperature ..... | Install the temperature sensor in the combustion zone or in the ductwork immediately downstream of the combustion zone before any substantial heat exchange occurs; locate the temperature sensor in a position that provides a representative temperature; use a temperature sensor with an accuracy of ±1 percent of the temperature being measured, expressed in degrees Celsius (C) or ±0.5 degrees C, whichever is greater; shield the temperature sensor system from electromagnetic interference and chemical contaminants; if you use a chart recorder, it shall have a sensitivity in the minor division of at least 20 degrees Fahrenheit; perform an electronic calibration at least semiannually according to the procedures in the manufacturer's owners manual; following the electronic calibration, conduct a temperature sensor validation check, in which a second or redundant temperature sensor placed nearby the process temperature sensor shall yield a reading within 16.7 degrees C of the process temperature sensor's reading; record the results of each calibration and validation check; conduct calibration and validation checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range, or install a new temperature sensor; and at least monthly, inspect all components for integrity and all electrical connections for continuity, oxidation, and galvanic corrosion. |
| 5. pH ..... | Locate the pH sensor in a position that provides a representative measurement of pH; ensure the sample is properly mixed and representative of the fluid to be measured; check the pH meter's calibration on at least two points every 8 hours of process operation; at least monthly, inspect all components for integrity and all electrical components for continuity; record the results of each inspection; and if you use pH strips to measure the pH of the water exiting a wet scrubber as an alternative to a continuous parameter monitoring system, you shall use pH strips with an accuracy of ±10 percent. |
| 6. HCl concentration ..... | Use a colormetric tube sampling system with a printed numerical scale in ppmv, a standard measurement range of 1 to 10 ppmv (or 1 to 30 ppmv if applicable), and a standard deviation for measured values of no more than ±15 percent. System shall include a gas detection pump and hot air probe if needed for the measurement range. |

**TABLE 42 TO Subpart UUU OF PART 63.—ADDITIONAL** INFORMATION FOR INITIAL NOTIFICATION OF COMPLIANCE STATUS

[As stated in § 63.1574(d), you shall meet each requirement in the following table that applies to you]

| For * * * | You shall provide this additional information * * * |
|---|---|
| 1. Identification of affected sources and emission points. | Nature, size, design, method of operation, operating design capacity of each affected source; identify each emission point for each HAP; identify any affected source or vent associated with an affected source not subject to the requirements of Subpart UUU. |
| 2. Initial compliance ..... | Identification of each emission limitation you will meet for each affected source, including any option you select (i.e., NSPS, PM or Ni, flare, percent reduction, concentration, options for bypass lines); if applicable, certification that you have already conducted a performance test to demonstrate initial compliance with the NSPS for an affected source; certification that the vents meet the applicable emission limit and the continuous opacity or that the emission monitoring system meets the applicable performance specification; if applicable, certification that you have installed and verified the operational status of equipment by your compliance date for each bypass line that meets the requirements of Option 2, 3, or 4 in § 63.1569 and what equipment you installed; identification of the operating limit for each affected source, including supporting documentation; if your affected source is subject to the NSPS, certification of compliance with NSPS emission limitations and performance specifications; a brief description of performance test conditions (capacity, feed quality, catalyst, etc.); an engineering assessment (if applicable); and if applicable, the flare design (e.g., steam-assisted, air-assisted, or non-assisted), all visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the Method 22 test. |
| 3. Continuous compliance ..... | Each monitoring option you elect; and identification of any unit or vent for which monitoring is not required; and the definition of ''operating day.'' (This definition, subject to approval by the applicable permitting authority, shall specify the times at which a 24-hr operating day begins and ends.) |

**TABLE 43 TO Subpart UUU OF PART 63.**—REQUIREMENTS FOR REPORTS

[As stated in § 63.1575(a), you shall meet each requirement in the following table that applies to you]

| You shall submit a(n) * * * | The report shall contain * * * | You shall submit the report * * * |
|---|---|---|
| 1. Compliance report ..... | If there are not deviations from any emission limitation or work practice standard that applies to you, a statement that there were no deviations from the standards during the reporting period and that no continuous opacity monitoring system or continuous emission monitoring system was inoperative, inactive, out-of-control, repaired, or adjusted; and if you have a deviation from any emission limitation or work practice standard during the reporting period, the report shall contain the information in § 63.1575(d) or (e) | Semiannually according to the requirements in § 63.1575(b). |

**Table 44 to Subpart UUU of Part 63 -** Applicability of NESHAP General Provisions to Subpart UUU
As stated in §63.1577, you shall meet each requirement in the following table that applies to you.

| Citation | Subject | Applies to Subpart UUU | Explanation |
|---|---|---|---|
| §63.1 | Applicability | Yes | Except that Subpart UUU specifies calendar or operating day. |
| §63.2 | Definitions | Yes | |
| §63.3 | Units and Abbreviations | Yes | |
| §63.4 | Prohibited Activities | Yes | |
| §63.5(a)-(c) | Construction and Reconstruction | Yes | In §63.5(b)(4), replace the reference to §63.9 with §63.9(b)(4) and (5). |
| §63.5(d)(1)(i) | Application for Approval of Construction or Reconstruction - General Application Requirements | Yes | Except, Subpart UUU specifies the application is submitted as soon as practicable before startup but no later than 90 days (rather than 60) after the promulgation date where construction or reconstruction had commenced and initial startup had not occurred before promulgation. |
| §63.5(d)(1)(ii) | | Yes | Except that emission estimates specified in §63.5(d)(1) (ii)(H) are not required. |
| §63.5(d)(1)(iii) | | No | Subpart UUU specifies submission of notification of compliance status. |
| §63.5(d)(2) | | No | |
| §63.5(d)(3) | | Yes | Except that §63.5(d)(3)(ii) does not apply. |
| §63.5(d)(4) | | Yes | |
| §63.5(e) | Approval of Construction or Reconstruction | Yes | |
| §63.5(f)(1) | Approval of Construction or Reconstruction Based on State Review | Yes | |
| §63.5(f)(2) | | Yes | Except that 60 days is changed to 90 days and cross-reference to §63.9(b)(2) does not apply. |
| §63.6(a) | Compliance with Standards and Maintenance - Applicability | Yes | |
| §63.6(b)(1)-(4) | Compliance Dates for New and Reconstructed Sources | Yes | |
| §63.6(b)(5) | | Yes | Except that Subpart UUU specifies different compliance dates for sources. |
| §63.6(b)(6) | [Reserved] | Not appli-cable | |

| | | | |
|---|---|---|---|
| §63.6(b)(7) | Compliance Dates for New and Reconstructed Area Sources That Become Major | Yes | |
| §63.6(c)(1)-(2) | Compliance Dates for Existing Sources | Yes | Except that Subpart UUU specifies different compliance dates for sources subject to Tier II gasoline sulfur control requirements. |
| §63.6(c)(3)-(4) | [Reserved] | Not appli-cable | |
| §63.6(c)(5) | Compliance Dates for Existing Area Sources That Become Major | Yes | |
| §63.6(d) | [Reserved] | Not appli-cable | |
| §63.6(e)(1)-(2) | Operation and Maintenance Requirements | Yes | |
| §63.6(e)(3)(i)-(iii) | Startup, Shutdown, and Malfunction Plan | Yes | |
| §63.6(e)(3)(iv) | | Yes | Except that reports of actions not consistent with plan are not required within 2 and 7 days of action but rather shall be included in next periodic report. |
| §63.6(e)(3)(v)-(viii) | | Yes | The owner or operator is only required to keep the latest version of the plan. |
| §63.6(f)(1)-(2)(iii)(C) | Compliance with Emission Standards | Yes | |
| §63.6(f)(2)(iii)(D) | | No | |
| §63.6(f)(2)(iv)-(v) | | Yes | |
| §63.6(f)(3) | | Yes | |
| §63.6(g) | Alternative Standard | Yes | |
| §63.6(h) | Opacity/VE Standards | Yes | |
| §63.6(h)(2)(i) | Determining Compliance with Opacity/VE Standards | No | Subpart UUU specifies methods. |
| §63.6(h)(2)(ii) | [Reserved] | Not appli-cable | |
| §63.6(h)(2)(iii) | | Yes | |
| §63.6(h)(3) | [Reserved] | Not appli-cable | |
| §63.6(h)(4) | Notification of Opacity/VE Observation Date | Yes | Applies to Method 22 tests. |
| §63.6(h)(5) | Conducting Opacity/VE Observations | No | |
| §63.6(h)(6) | Records of Conditions During Opacity/VE Observations | Yes | Applies to Method 22 observations. |
| §63.6(h)(7)(i) | Report COM Monitoring Data from Performance Test | Yes | |

| | | | |
|---|---|---|---|
| §63.6(h)(7)(ii) | Using COM Instead of Method 9 | No | |
| §63.6(h)(7)(iii) | Averaging Time for COM during Performance Test | Yes | |
| §63.6(h)(7)(iv) | COM Requirements | Yes | |
| §63.6(h)(8) | Determining Compliance with Opacity/VE Standards | Yes | |
| §63.6(h)(9) | Adjusted Opacity Standard | Yes | |
| §63.6(i)(1)-(14) | Extension of Compliance | Yes | Not applicable to an affected source with Tier II compliance date. May be applicable to an affected source exempt from Tier II rule. |
| §63.6(i)(15) | [Reserved] | Not appli-cable | |
| §63.6(i)(16) | | Yes | |
| §63.6(j) | Presidential Compliance Exemption | Yes | |
| §63.7(a)(1) | Performance Test Requirements-Applicability | Yes | Except that Subpart UUU specifies the applicable test and demonstration procedures. |
| §63.7(a)(2) | Performance Test Dates | No | Test results shall be submitted in the Notification of Compliance Status report due 150 days after the compliance date. |
| §63.7(a)(3) | Section 114 Authority | Yes | |
| §63.7(b) | Notifications | Yes | Except that Subpart UUU specifies notification at least 30 days prior to the scheduled test date rather than 60 days. |
| §63.7(c) | Quality Assurance Program/Site-Specific Test Plan | Yes | |
| §63.7(d) | Performance Test Facilities | Yes | |
| §63.7(e) | Conduct of Tests | Yes | |
| §63.7(f) | Alternative Test Method | Yes | |
| §63.7(g) | Data Analysis, Record Keeping, Reporting | Yes | Except performance test reports shall be submitted with notification of compliance status due 150 days after the compliance date. |
| §63.7(h) | Waiver of Tests | Yes | |
| §63.8(a)(1) | Monitoring Requirements - Applicability | Yes | |
| §63.8(a)(2) | Performance Specifications | Yes | |
| §63.8(a)(3) | [Reserved] | Not appli-cable | |
| §63.8(a)(4) | Monitoring with Flares | Yes | |
| §63.8(b)(1) | Conduct of Monitoring | Yes | |

| | | | |
|---|---|---|---|
| §63.8(b)(2)-(3) | Multiple Effluents and Multiple Monitoring Systems | Yes | Subpart UUU specifies the required monitoring locations. |
| §63.8(c)(1) | Monitoring System Operation and Maintenance | Yes | |
| §63.8(c)(1)(i)-(ii) | Startup, Shutdown, and Malfunctions | Yes | Except that Subpart UUU specifies that reports are not required if actions are consistent with the SSM plan, unless requested by the permitting authority. If actions are not consistent, actions shall be described in next compliance report. |
| §63.8(c)(1)(iii) | Compliance with Operation and Maintenance Requirements | Yes | |
| §63.8(c)(2)-(3) | Monitoring System Installation | Yes | Except that Subpart UUU specifies that for continuous parameter monitoring systems, operational status verification includes completion of manufacturer written specifications or installation operation, and calibration of the system or other written procedures that provide adequate assurance that the equipment will monitor accurately. |
| §63.8(c)(4) | Continuous Monitoring System Requirements | No | Subpart UUU specifies operational requirements. |
| §63.8(c)(4)(i)-(ii) | Continuous Monitoring System Requirements | Yes | Except that these requirements apply only to a continuous opacity monitoring system or a continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or $_{SO2}$ limits. |
| §63.8(c)(5) | COM Minimum Procedures | Yes | |
| §63.8(c)(6) | CMS Requirements | No | Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or $_{SO2}$ limits. |
| §63.8(c)(7)-(8) | CMS Requirements | Yes | |
| §63.8(d) | Quality Control Program | Yes | Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or $_{SO2}$ limits. |

| | | | |
|---|---|---|---|
| §63.8(e) | CMS Performance Evaluation | Yes | Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or $_{SO2}$ limits. Results are to be submitted as part of the Notification of Compliance Status due 150 days after the compliance date. |
| §63.8(f)(1)-(5) | Alternative Monitoring Method | Yes | Except that Subpart UUU specifies procedures for requesting alternative monitoring systems and alternative parameters. |
| §63.8(f)(6) | Alternative to Relative Accuracy Test | Yes | Applicable to continuous emission monitoring systems if performance specification requires a relative accuracy test audit. |
| §63.8(g)(1)-(4) | Reduction of Monitoring Data | Yes | Applies to a continuous opacity monitoring system or continuous emission monitoring system. |
| §63.8(g)(5) | Data Reduction | No | Subpart UUU specifies requirements. |
| §63.9(a) | Notification Requirements - Applicability | Yes | Duplicate Notification of Compliance Status report to the Regional Administrator may be required. |
| §63.9(b)(1)-(5) | Initial Notifications | Yes | Except that notification of construction or reconstruction is to be submitted as soon as practicable before startup but no later than 30 days (rather than 60 days) after the effective date if construction or reconstruction had commenced but startup had not occurred before the effective date. |
| §63.9(c) | Request for Extension of Compliance | Yes | |
| §63.9(d) | New Source Notification for Special Compliance Requirements | Yes | |
| §63.9(e) | Notification of Performance Test | Yes | Except that notification is required at least 30 days before test. |
| §63.9(f) | Notification of VE/Opacity Test | Yes | |
| §63.9(g) | Additional Notification Requirements for Sources with Continuous Monitoring Systems | Yes | Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or $_{SO2}$ limits. |
| §63.9(h) | Notification of Compliance Status | Yes | Except that Subpart UUU specifies the notification is due no later than 150 days after compliance date. |
| §63.9(i) | Adjustment of Deadlines | Yes | |

| | | | |
|---|---|---|---|
| §63.9(j) | Change in Previous Information | Yes | |
| §63.10(a) | Record Keeping and Reporting-Applicability | Yes | |
| §63.10(b) | Records | Yes | Except that §63.10(b)(2)(xiii) applies if you use a continuous emission monitoring system to meet the NSPS or you elect to meet the NSPS, CO, or $_{SO2}$ reduced sulfur limit and the performance evaluation requires a relative accuracy test audit. |
| §63.10(c)(1)-(6), (9)-(15) | Additional Records for Continuous Monitoring Systems | Yes | Except that these requirements apply if you use a continuous opacity monitoring system or a continuous emission monitoring system to meet the NSPS or elect to meet the NSPS opacity, CO, or $_{SO2}$ limits. |
| §63.10(c)(7)-(8) | Records of Excess Emissions and Exceedances | No | Subpart UUU specifies requirements. |
| §63.10(d)(1) | General Reporting Requirements | Yes | |
| §63.10(d)(2) | Performance Test Results | No | Subpart UUU requires performance test results to be reported as part of the Notification of Compliance Status due 150 days after the compliance date. |
| §63.10(d)(3) | Opacity or VE Observations | Yes | |
| §63.10(d)(4) | Progress Reports | Yes | |
| §63.10(d)(5)(i) | Startup, Shutdown, and Malfunction Reports | Yes | Except that reports are not required if actions are consistent with the SSM plan, unless requested by permitting authority. |
| §63.10(d)(5)(ii) | | Yes | Except that actions taken during a startup, shut- down, or malfunction that are not consistent with the plan do not need to be reported within 2 and 7 days of commencing and completing the action, respectively, but shall be included in the next periodic report. |
| §63.10(e)(1)-(2) | Additional CMS Reports | Yes | Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or $_{SO2}$ limits. Reports of performance evaluations shall be submitted in Notification of Compliance Status. |
| §63.10(e)(3) | Excess Emissions/CMS Performance Reports | No | Subpart UUU specifies the applicable requirements. |
| §63.10(e)(4) | COMS Data Reports | Yes | |

| | | | |
|---|---|---|---|
| §63.10(f) | Record Keeping/ Reporting Waiver | Yes | |
| §63.11 | Control Device Requirements | Yes | Applicable to flares. |
| §63.13 | Addresses | Yes | |
| §63.14 | Incorporation by Reference | Yes | |
| §63.15 | Availability of Information | Yes | |

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

### 2. Additional Terms and Conditions

2.a None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

Emissions Unit ID: **P009**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| P009 - Sulfur Recovery Unit (SRU) No. 1 with Tail Gas Treater, Thermal Oxidizer, and sulfur pit | OAC rule 3745-31-02(A)(2) (PTI 04-01290 as issued on July 25, 2002) | See sections A.I.2.a. and A.I.2.b. |
| | OAC rule 3745-31-05(D) (PTI 04-1046 as modified on August 5, 1998) | See section A.II.1. |
| | OAC rule 3745-18-54(W)(7) | See section A.I.2.c. |
| | 40 CFR Part 60, Subpart J<br>40 CFR Part 52.21 | See section A.I.2.d. |
| | OAC rule 3745-21-09(T) | See section A.I.2.e. |
| equipment leaks | 40 CFR Part 63, Subpart CC | See section A.I.2.f. |
| SRU | 40 CFR Part 63, Subpart UUU<br>40 CFR 63.1563(b) | See section A.I.2.g. |
| | 40 CFR 63.1563(e) | See section A.I.2.h. |
| | 40 CFR 63.1568(a) | See section A.I.2.i. |
| | 40 CFR 63.1577 | See section A.I.2.j. |
| bypass lines | 40 CFR 63.1569(a) | See sections A.I.2.k and A.I.2.l. |

## 2. Additional Terms and Conditions

2.a Permit to Install 04-01290 incorporates the emission limits and schedules set out in paragraphs 14-18 and 21 of the Consent Decree (United States of America, et al., v. BP Exploration & Oil Co., et al., Civil Action No. 2:96CV095 RL).

2.b The permittee shall re-route all NSPS sulfur recovery plant sulfur pit emissions such that they are treated, monitored, and included as part of the sulfur recovery plant's emissions subject to the NSPS Subpart J limit for $SO_2$, 40 CFR 60.104(a)(2), by no later than the first turnaround of the Claus train that occurs after July 18, 2001.

2.c The emission limitation established by this rule is equivalent to or less stringent than the limit established by 40 CFR Part 60, Subpart J.

2.d The permittee shall not discharge or cause the discharge of any gases into the atmosphere from any Claus sulfur recovery plant containing in excess of 250 ppm by volume (dry basis) of sulfur dioxide ($SO_2$) at zero percent excess air.

2.e The permittee shall comply with all applicable equipment leak terms and conditions found in sections A.I.2, A.II, A.III, A.IV, and A.V referencing OAC rule 3745-21-09(T) in Part II - Specific Facility Terms and Conditions of this permit.

2.f In accordance with 40 CFR Part 63, Subpart CC, the permittee shall comply with the applicable equipment leak provisions of 40 CFR Part 60, Subpart VV [See sections A.I, A.II, A.III, A.IV, and A.V in Part II of this permit that refers to Subpart VV] and paragraph (b) of 40 CFR 63.648 [See section A.II in Part II of this permit] (except as provided in paragraphs (a)(1), (a)(2), and (c) through (i) of 40 CFR 63.648).

2.g The permittee shall comply with the emission limitations and work practice standards for existing sources in 40 CFR Part 63, Subpart UUU by no later than April 11, 2005 unless an extension of compliance is granted under 40 CFR 63.1563(c).

2.h The permittee must meet the notification requirements in 40 CFR 63.1574 [See section A.IV] according to the schedule in 40 CFR 63.1574 and in 40 CFR Part 63, Subpart A. Some of the notifications must be submitted before the date the permittee is required to comply with the emission limitations and work practice standards in 40 CFR Part 63, Subpart UUU.

2.i The permittee must meet each emission limitation in Table 29 of this subpart that applies to this emissions unit. The permittee shall meet the requirements for NSPS units.

2.j Table 44 of [See section A.VI.] shows which parts of the General Provision in 40 CFR 63.1 through 63.15 apply to this emissions unit.

2.k [63.1569(a)(1)] HAP EMISSIONS FROM BYPASS LINES
The permittee must meet each work practice standard in Table 36 [See section A.VI.] that applies to this emissions unit. The permittee can choose from the four following options:

i. [63.1569(a)(1)(i)]
The permittee can elect to install an automated system (Option 1);

ii. [63.1569(a)(1)(ii)]
The permittee can elect to use a manual lock system (Option 2);

iii. [63.1569(a)(1)(iii)]
The permittee can elect to seal the line (Option 3); or

iv. [63.1569(a)(1)(iv)]
The permittee can elect to vent to a control device (Option 4).

2.l [63.1569(a)(2)]
As provided in 40 CFR 63.6(g), the U.S. EPA, may choose to grant the permittee permission to use an alternative to the work practice standard in 63.1569(a)(1) [See section A.I.2.].

## II. Operational Restrictions

1. [OAC rule 3745-31-05(D) as established by PTI 04-1046]
The permittee shall continue to implement and maintain the Preventive Maintenance and Malfunction Abatement Plan (PMMAP) for this emissions unit. The plan may be revised and resubmitted in the future subject to Ohio EPA review and comment. The comprehensive plan shall include, but not be limited to, the following:

a. an identification of events, within the SRU or Tail Gas Treater or upstream/downstream units/operations, likely to cause malfunctions and/or non-routine shutdowns or bypasses of the SRU or Tail Gas Treater, and a description of the steps taken to prevent or minimize the likelihood of such events from occurring;

b. a description of steps or procedures reasonably available to be taken in order to prevent or minimize flaring of feeds to the SRUs during any period when one or more SRUs is shutdown or being bypassed, along with an indication of limitations on the availability of such steps;

c. a description of steps to be taken to minimize excess emissions from the SRUs during routine or scheduled startups and shutdowns of the SRUs and Tail Gas Treater;

d. a comprehensive preventive maintenance program, including a description of the items or conditions that will be inspected, the frequency of these inspections or repairs, and an identification of the types and quantities of replacement parts which will be maintained in inventory for quick replacement;

e. an identification of the emissions unit and the operating outlet variables of the air pollution control equipment that will be monitored in order to detect a malfunction or failure, the normal operating range of these variables, and a description of the monitoring

or surveillance procedures and of the method of informing operating personnel of any malfunction, including alarm systems, lights and/or other indicators; and,

f. a description of the corrective procedures that will be taken in the event of a malfunction or failure in order to achieve compliance with any applicable law or permit limit as expeditiously as practicable.

2. [40 CFR Part 63, Subpart UUU]
The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward.

a. [63.1568(a)] REQUIREMENTS FOR HAP EMISSIONS FROM SRUs

i. [63.1568(a)(2)]
The permittee must meet each operating limit in Table 30 [See section A.VI] that applies to this emissions unit.

ii. [63.1568(a)(3)]
The permittee must prepare an operation, maintenance, and monitoring plan according to the requirements in 40 CFR 63.1574(f) [See section A.IV] and operate at all times according to the procedures in the plan.

b. [63.1569(a)(3)] REQUIREMENTS FOR HAP EMISSIONS FROM BYPASS LINES
The permittee must prepare an operation, maintenance, and monitoring plan according to the requirements in 40 CFR 63.1574(f) [See section A.IV] and operate at all times according to the procedures in the plan.

## III. Monitoring and/or Record Keeping Requirements

1. $SO_2$ Continuous Emissions Monitoring System

a. The permittee shall operate and maintain an instrument for continuously monitoring and recording the concentration (dry basis, zero percent excess air) of $SO_2$ emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

i. The span values for this monitor are 500 ppm $SO_2$ and 25 percent O2.

ii. The performance evaluations for this $SO_2$ monitor under 40 CFR 60.13(c) shall use Performance Specification 2. Methods 6 or 6C and 3 or 3A shall be used for conducting the relative accuracy evaluations.

b. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in Appendix B of

40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

c. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration measured in the CD prior to resetting the calibration, if performed, or record the amount of adjustment.

d. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in Appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

e. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

f. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

g. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

i. Calibration of CEMS.
ii. CD determination and adjustment of CEMS.
iii. Preventive maintenance of CEMS (including spare parts inventory).
iv. Data recording, calculations, and reporting.
v. Accuracy audit procedures including sampling and analysis methods.
vi. Program of corrective action for malfunctioning CEMS.

As described in Section 5.2 of 40 CFR Part 60, Appendix F, Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

h. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

i. The permittee shall maintain records to verify that the Preventive Maintenance and Malfunction Abatement Plan is being implemented and the content of the of the PMMAP has been met.

2. [40 CFR Part 63, Subpart UUU]
The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward.

a. [63.1570] GENERAL COMPLIANCE REQUIREMENTS - 40 CFR Part 63, Subpart UUU

i. [63.1570(a)]
The permittee must be in compliance with all of the non-opacity standards in this subpart during the times specified in 40 CFR 63.6(f)(1).

ii. [63.1570(c)]
The permittee must always operate and maintain the affected source, including air pollution control and monitoring equipment, according to the provisions in 40 CFR 63.6(e)(1)(i). During the period between April 11, 2005 and the date upon which continuous monitoring systems have been installed and validated and any applicable operating limits have been set, the permittee must maintain a log detailing the operation and maintenance of the process and emissions control equipment.

iii. [63.1570(d)]
The permittee must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in 40 CFR 63.6(e)(3).

iv. [63.1570(e)]
During periods of startup, shutdown, and malfunction, the permittee must operate in accordance with the SSMP.

v. [63.1570(f)]
The permittee must report each instance in which each emission limitation that was not met and each applicable operating limit in 40 CFR Part 63, Subpart UUU that was not met. This includes periods of startup, shutdown, and malfunction. The permittee also must report each instance in which the applicable work practice standards in 40 CFR Part 63, Subpart UUU that were not met. These instances are deviations from the emission limitations and work practice standards

in this subpart. These deviations must be reported according to the requirements in 40 CFR 63.1575 [See section A.IV].

vi. [63.1570(g)]
Consistent with 40 CFR 63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if the permittee demonstrates to the Administrator's satisfaction that the permittee was operating in accordance with the SSMP. The SSMP must require that good air pollution control practices are used during those periods. The plan must also include elements designed to minimize the frequency of such periods (i.e., root cause analysis). The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in 40 CFR 63.6(e) and the contents of the SSMP.

b. [63.1572] MONITORING, INSTALLATION, OPERATION, AND MAINTENANCE REQUIREMENTS [Tables 40 and 41] - 40 CFR Part 63, Subpart UUU

i. [63.1572(a)]
The permittee must install, operate, and maintain each continuous emission monitoring system according to the requirements in 40 CFR 63.1572(a)(1) through (4) [See section A.III].

(a). [63.1572(a)(1)]
The permittee must install, operate, and maintain each continuous emission monitoring system according to the requirements in Table 40 [See section A.VI].

(b). [63.1572(a)(3)]
As specified in 40 CFR 63.8(c)(4)(ii), each continuous emission monitoring system must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(c). [63.1572(a)(4)]
Data must be reduced as specified in 40 CFR 63.8(g)(2).

ii. [63.1572(c)]
The permittee must install, operate, and maintain each continuous parameter monitoring system according to the following paragraphs of this section.

(a). [63.1572(c)(1)]
Each continuous parameter monitoring system must be installed, operated, and maintained according to the requirements in Table 41 [See section A.VI] and in a manner consistent with the manufacturer's specifications or other written procedures that provide adequate assurance that the equipment will monitor accurately.

(b). [63.1572(c)(2)]
The continuous parameter monitoring system must complete a minimum of one cycle of operation for each successive 15-minute period. The permittee must have a minimum of four successive cycles of operation to have a valid hour of data (or at least two if a calibration check is performed during that hour or if the continuous parameter monitoring system is out-of-control).

(c). [63.1572(c)(3)]
Each continuous parameter monitoring system must have valid hourly average data from at least 75 percent of the hours during which the process operated.

(d). [63.1572(c)(4)]
Each continuous parameter monitoring system must determine and record the hourly average of all recorded readings and if applicable, the daily average of all recorded readings for each operating day. The daily average must cover a 24-hour period if operation is continuous or the number of hours of operation per day if operation is not continuous.

(e). [63.1572(c)(5)]
Each continuous parameter monitoring system must record the results of each inspection, calibration, and validation check.

iii. [63.1572(d)]
The permittee must monitor and collect data according to the requirements in 40 CFR 63.1572(d)(1) and (d)(2) [See section A.III].

(a). [63.1572(d)(1)]
Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), the permittee must conduct all monitoring in continuous operation (or collect data at all required intervals) at all times the affected unit is operating.

(b). [63.1572(d)(2)]
The permittee may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities for purposes of this regulation, including data averages and calculations, for fulfilling a minimum data availability requirement, if applicable. The permittee must use all the data collected during all other periods in assessing the operation of the control device and associated control system.

c. [63.1573] MONITORING ALTERNATIVES - 40 CFR Part 63, Subpart UUU

i. [63.1573(c)] USING ANOTHER TYPE OF MONITORING SYSTEM

The permittee may request approval from the permitting authority to use an automated data compression system. An automated data compression system does not record monitored operating parameter values at a set frequency (e.g., once every hour) but records all values that meet set criteria for variation from previously recorded values. The permittee's request must contain a description of the monitoring system and data recording system, including the criteria used to determine which monitored values are recorded and retained, the method for calculating daily averages, and a demonstration that the system meets all of the criteria in 40 CFR 63.1576(c)(1) through (5) [See section A.III]:

(a). [63.1573(c)(1)]
The system measures the operating parameter value at least once every hour;

(b). [63.1573(c)(2)]
The system records at least 24 values each day during periods of operation;

(c). [63.1573(c)(3)]
The system records the date and time when monitors are turned off or on;

(d). [63.1573(c)(4)]
The system recognizes unchanging data that may indicate the monitor is not functioning properly, alerts the operator, and records the incident; and

(e). [63.1573(c)(5)]
The system computes daily average values of the monitored operating parameter based on recorded data.

ii. [63.1573(d)] REQUESTING MONITORING ALTERNATIVES
The permittee may request approval to monitor parameters other than those required in this subpart. The permittee must request approval if:

(a). [63.1573(d)(1)]
The permittee uses a control device other than a thermal incinerator, boiler, process heater, flare, electrostatic precipitator, or wet scrubber;

(b). [63.1573(d)(2)]
The permittee uses a combustion control device (e.g., incinerator, flare, boiler or process heater with a design heat capacity of at least 44 MW, boiler or process heater where the vent stream is introduced into the flame zone), electrostatic precipitator, or scrubber but wants to monitor a parameter other than those specified; or

(c). [63.1573(d)(3)]
The permittee wishes to use another type of continuous emission monitoring system that provides direct measurement of a pollutant (i.e., a PM or multi-metals HAP continuous emission monitoring system, a carbonyl sulfide/carbon disulfide continuous emission monitoring system,

a TOC continuous emission monitoring system, or HCl continuous emission monitoring system).

iii. [63.1573(e)] REQUESTING MONITOR ALTERNATIVE PARAMETERS
The permittee must submit a request for review and approval or disapproval to the Administrator of the EPA. The request must include the information in 63.1573 (e)(1) through (5) [See section A.III].

(a). [63.1573(e)(1)]
A description of each affected source and the parameter(s) to be monitored to determine whether the affected source will continuously comply with the emission limitations and an explanation of the criteria used to select the parameter(s).

(b). [63.1573(e)(2)]
A description of the methods and procedures that will be used to demonstrate that the parameter can be used to determine whether the affected source will continuously comply with the emission limitations and the schedule for this demonstration. The permittee must certify that an operating limit will be established for the monitored parameter(s) that represents the conditions in existence when the control device is being properly operated and maintained to meet the emission limitation.

(c). [63.1573(e)(3)]
The frequency and content of monitoring, recording, and reporting, if monitoring and recording are not continuous. The permittee also must include the rationale for the proposed monitoring, recording, and reporting requirements.

(d). [63.1573(e)(4)]
Supporting calculations.

(e). [63.1573(e)(5)]
Averaging time for the alternative operating parameter.

d. [63.1576] RECORD KEEPING REQUIREMENTS - 40 CFR Part 63, Subpart UUU

i. [63.1576(a)]
The permittee must keep the records specified in 63.1576(a)(1) through (3) [See section A.III].

(a). [63.1576(a)(1)]
A copy of each notification and report that the permittee submitted to comply with this subpart, including all documentation supporting any initial notification or Notification of Compliance Status that the permittee submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv).

(b). [63.1576(a)(2)]
The records in 40 CFR 63.6(e)(1)(iii) through (v) related to startup, shutdown, and malfunction.

(c). [63.1576(a)(3)]
Records of performance tests, performance evaluations, and visible emission observations as required in 40 CFR 63.10(b)(2)(viii).

ii. [63.1576(b)]
For each continuous emission monitoring system, the permittee must keep the records required in 63.1576(b)(1) through (5) [See section A.III].

(a). [63.1576(b)(1)]
Records described in 40 CFR 63.10(b)(2)(vi) through (xi) of Subpart A.

(b). [63.1576(b)(3)]
Previous (i.e., superceded) versions of the performance evaluation plan as required in 40 CFR 63.8(d)(3) of Subpart A.

(c). [63.1576(b)(4)]
Requests for alternatives to the relative accuracy test for continuous emission monitoring systems as required in 40 CFR 63.8(f)(6)(i) of Subpart A.

(d). [63.1576(b)(5)]
Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

iii. [63.1576(d)]
The permittee must keep records required by Tables 34 and 35 [See section A.VI] (for SRUs) and Table 39 [See section A.VI] (for bypass lines) to show continuous compliance with each emission limitation that applies to this emissions unit.

iv. [63.1576(e)]
The permittee must keep a current copy of the operation, maintenance, and monitoring plan onsite and available for inspection. The permittee also must keep records to show continuous compliance with the procedures in the operation, maintenance, and monitoring plan.

v. [63.1576(f)]
The permittee also must keep the records of any changes that affect emission control system performance including, but not limited to, the location at which the vent stream is introduced into the flame zone for a boiler or process heater.

vi. [63.1576(g)]

The records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1).

vii. [63.1576(h)]
As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

viii. [63.1576(i)]
The permittee must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee can keep the records offsite for the remaining 3 years.

3. Except as otherwise provided above, all records required under Section A.III of this permit shall be maintained in accordance with the Monitoring and Related Record Keeping Requirements of Part ***I*** - General Terms and Conditions.

## IV. Reporting Requirements

1. $SO_2$ Continuous Emissions Monitoring System Reporting Requirements

a. The permittee shall submit an $SO_2$ excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average concentration greater than 250 ppm by volume (dry basis) of $SO_2$ at zero percent excess air. Written reports of excess emissions shall include the following information:

i. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

ii. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

iii. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

iv. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

b. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

i. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

ii. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

c. The permittee shall submit a quarterly report for each CEMS the accuracy results from Section 6 and the CD assessment results from Section 4 of 40 CFR Part 60 Appendix F Procedure 1. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

i. Permittee name and address.
ii. Identification and location of monitors in the CEMS.
iii. Manufacturer and model number of each monitor in the CEMS.
iv. Assessment of CEMS data accuracy and date of assessment as determined by a RATA, RAA, or CGA described in Section 5 of 40 CFR Part 60 Appendix F Procedure 1 including the RA for the RATA, the A for the RAA or CGA, the RM results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.
v. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.
vi. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5 of 40 CFR Part 60 Appendix F Procedure 1.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60 Appendix F, Procedure 1.

2. [40 CFR Part 63, Subpart UUU]
The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward except as stated in 40 CFR 63.1574 which may have reports due before April 11, 2005.

a. [63.1574] NOTIFICATION SUBMITTAL - 40 CFR Part 63, Subpart UUU

i. [63.1574(a)]
Except as allowed in 40 CFR 63.1574(a)(1) through (a)(3) [See section A.IV], the permittee must submit all of the notifications in 40 CFR 63.6(h), 63.7(b) and (c), 63.8(e), 63.8(f)(4), 63.8(f)(6), and 63.9(b) through (h) that apply to this emissions unit by the dates specified.

(a). [63.1574(a)(1)]
The permittee must submit the notification of the intention to construct or reconstruct according to 40 CFR 63.9(b)(5). This deadline also applies to the application for approval of construction or reconstruction and approval of construction or reconstruction based on State preconstruction review required in 40 CFR 63.5(d)(1)(i) and 63.5(f)(2).

(b). [63.1574(a)(2)]
The permittee must submit the notification of intent to conduct a performance test required in 40 CFR 63.7(b) at least 30 calendar days before the performance test is scheduled to begin (instead of 60 days).

(c). [63.1574(a)(3)]
If the permittee is required to conduct a performance test, performance evaluation, design evaluation, visible emission observation, or other initial compliance demonstration, the permittee must submit a notification of compliance status according to 40 CFR 63.9(h)(2)(ii). The permittee can submit this information in an operating permit application, in an amendment to an operating permit application, in a separate submission, or in any combination. If the required information has been submitted previously, the permittee does not have to provide a separate notification of compliance status. Just refer to the earlier submissions instead of duplicating and resubmitting the previously submitted information.

(i) [63.1574(a)(3)(i)]
For each initial compliance demonstration that does not include a performance test, the permittee must submit the Notification of Compliance Status no later than 30 calendar days following completion of the initial compliance demonstration.

(b) [63.1574(a)(3)(ii)]

For each initial compliance demonstration that includes a performance test, the permittee must submit the notification of compliance status, including the performance test results, no later than 150 calendar days after April 11, 2005.

ii. [63.1574(c)]
As specified in 40 CFR 63.9(b)(3), if the permittee starts the new or reconstructed affected source on or after April 11, 2002, the permittee must submit the initial notification no later than 120 days after April 11, 2005.

iii. [63.1574(d)]
The permittee also must include the information in Table 42 [See section A.VI] in the notification of compliance status.

iv. [63.1574(f)]
As required by 40 CFR Part 63, Subpart UUU, the permittee must prepare and implement an operation, maintenance, and monitoring plan for each affected source, control system, and continuous monitoring system. The purpose of this plan is to detail the operation, maintenance, and monitoring procedures that the permittee will follow.

(a). [63.1574(f)(1)]
The permittee must submit the plan to the Toledo Division of Environmental Services for review and approval along with the notification of compliance status. While the permittee does not have to include the entire plan in the part 70 or 71 permit, the permittee must include the duty to prepare and implement the plan as an applicable requirement in the part 70 or 71 operating permit. The permittee must submit any changes to the Toledo Division of Environmental Services for review and approval and comply with the plan until the change is approved.

(b). [63.1574(f)(2)]
Each plan must include, at a minimum, the applicable information as specified in 40 CFR 63.1574(f)(2)(i) through (x) [See section A.IV].

(i). [63.1574(f)(2)(i)]
Process and control device parameters to be monitored for each affected source, along with established operating limits.

(ii). [63.1574(f)(2)(ii)]
Procedures for monitoring emissions and process and control device operating parameters for each affected source.

(iv). [63.1574(f)(2)(viii)]
Monitoring schedule, including when the permittee will monitor and will not monitor an affected emissions unit (e.g., during the coke burn-off, regeneration process).

(v). [63.1574(f)(2)(ix)]
Quality control plan for each continuous emission monitoring system used to meet an emission limit in this subpart. This plan

must include procedures used for calibrations, accuracy audits, and adjustments to the system needed to meet applicable requirements for the system.

(vi) [63.1574(f)(2)(x)]
Maintenance schedule for each affected emissions unit, monitoring system, and control device that is generally consistent with the manufacturer's instructions for routine and long-term maintenance.

b. [63.1575] REPORTS FOR 40 CFR Part 63, Subpart UUU

i. [63.1575(a)]
The permittee must submit each report in Table 43 [See section A.VI] that applies to this emissions unit.

ii. [63.1575(b)]
Unless the Administrator has approved a different schedule, the permittee must submit each report by the date in Table 43 [See section A.VI] and according to the requirements in 40 CFR 63.1575(b)(1) through (b)(5) [See section A.IV].

(a). [63.1575(b)(1)]
The first compliance report must cover the period beginning April 11, 2005 and ending on June 30, 2005.

(b). [63.1575(b)(2)]
The first compliance report must be postmarked or delivered no later than July 31, 2005.

(c). [63.1575(b)(3)]
Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(d). [63.1575(b)(4)]
Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(e). [63.1575(b)(5)]
For each affected emissions unit that is subject to permitting regulations pursuant to 40 CFR Part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A), the permittee may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in 63.1575(b)(1) through (b)(4) [See section A.IV].

iii. 63.1575(c)]
The compliance report must contain the following information:

(a). [63.1575(c)(1)]
Company name and address.

(b). [63.1575(c)(2)]
Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

(c). [63.1575(c)(3)]
Date of report and beginning and ending dates of the reporting period.

(d). [63.1575(c)(4)]
If there are no deviations from any emission limitation that applies to this emissions unit and there are no deviations from the requirements for work practice standards, a statement that there were no deviations from the emission limitations or work practice standards during the reporting period and that no continuous emission monitoring system or continuous opacity monitoring system was inoperative, inactive, malfunctioning, out-of-control, repaired, or adjusted.

iv. [63.1575(d)]
For each deviation from an emission limitation and for each deviation from the requirements for work practice standards that occurs at an affected emissions unit where a continuous opacity monitoring system or a continuous emission monitoring system is not used to comply with the emission limitation or work practice standard in 40 CFR Part 63, Subpart UUU, the compliance report must contain the information in 63.1575(c)(1) through (c)(3) [See section A.IV] and the information in 63.1575(d)(1) through (d)(3) [See section A.IV].

(a). [63.1575(d)(1)]
The total operating time of each affected emissions unit during the reporting period.

(b). [63.1575(d)(2)]
Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(c). [63.1575(d)(3)]
Information on the number, duration, and cause for monitor downtime incidents (including unknown cause, if applicable, other than downtime associated with zero and span and other daily calibration checks).

v. [63.1575(e)]
For each deviation from an emission limitation occurring at an affected source where a continuous emission monitoring system is used to comply with the emission limitation, the permittee must include the information in 40 CFR 63.1575(d)(1) through(3) [See section A.IV] and the information in 63.1575(e)(1) through (13) [See section A.IV].

(a). [63.1575(e)(1)]
The date and time that each malfunction started and stopped.

(b). [63.1575(e)(2)]
The date and time that each continuous emission monitoring system was inoperative, except for zero (low-level) and high-level checks.

(c). [63.1575(e)(3)]
The date and time that each continuous emission monitoring system was out-of-control, including the information in 40 CFR 63.8(c)(8) of Subpart A.

(d). [63.1575(e)(4)]
The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(e). [63.1575(e)(5)]
A summary of the total duration of the deviation during the reporting period (recorded in hours for gases and in the averaging period specified in the regulation for other types of emission limitations), and the total duration as a percent of the total source operating time during that reporting period.

(f). [63.1575(e)(6)]
A breakdown of the total duration of the deviations during the reporting period and into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(g). [63.1575(e)(7)]
A ummary of the total duration of downtime for the continuous emission monitoring system during the reporting period (recorded in minutes for opacity and hours for gases and in the averaging time specified in the regulation for other types of standards), and the total duration of downtime for continuous emission monitoring system as a percent of the total source operating time during that reporting period.

(h). [63.1575(e)(8)]

A breakdown of the total duration of downtime for the continuous emission monitoring system during the reporting period into periods that are due to monitoring equipment malfunctions, non-monitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes, and other unknown causes.

(i). [63.1575(e)(9)]
An identification of each HAP that was monitored at the affected source.

(j). [63.1575(e)(10)]
A brief description of the process units.

(k). [63.1575(e)(11)]
The monitoring equipment manufacturer(s) and model number(s).

(l). [63.1575(e)(12)]
The date of the latest certification or audit for the continuous emission monitoring system.

(m). [63.1575(e)(13)]
A description of any change in the continuous emission monitoring system, processes, or controls since the last reporting period.

vi. [63.1575(f)]
The permittee also must include the information required in 63.1575(f)(1) through (f)(2) [See section A.IV] in each compliance report, if applicable.

(a). [63.1575(f)(1)]
A copy of any performance test done during the reporting period on any affected unit. The report may be included in the next semiannual report. The copy must include a complete report for each test method used for a particular kind of emission point tested. For additional tests performed for a similar emission point using the same method, the permittee must submit the results and any other information required, but a complete test report is not required. A complete test report contains a brief process description; a simplified flow diagram showing affected processes, control equipment, and sampling point locations; sampling site data; description of sampling and analysis procedures and any modifications to standard procedures; quality assurance procedures; record of operating conditions during the test; record of preparation of standards; record of calibrations; raw data sheets for field sampling; raw data sheets for field and laboratory analyses; documentation of calculations; and any other information required by the test method.

(b). [63.1575(f)(2)]
Any requested change in the applicability of an emission standard (e.g., changing from the PM standard to the Ni standard for catalytic cracking

units or from the HCl concentration standard to percent reduction for catalytic reforming units) in the periodic report. The permittee must include all information and data necessary to demonstrate compliance with the new emission standard selected and any other associated requirements.

vii. [63.1575(g)]
The permittee may submit reports required by other regulations in place of or as part of the compliance report if they contain the required information.

viii. [63.1575(h)]
The reporting requirements in paragraphs 63.1575(h)(1) and (2) [See section A.IV] apply to startups, shutdowns, and malfunctions:

(a). [63.1575(h)(1)]
When actions taken to respond are consistent with the plan, the permittee is not required to report these events in the semiannual compliance report and the reporting requirements in 40 CFR 63.6(e)(3)(iii) and 63.10(d)(5) do not apply.

(b). [63.1575(h)(2)]
When actions taken to respond are not consistent with the plan, the permittee must report these events and the response taken in the semiannual compliance report. In this case, the reporting requirements in 40 CFR 63.6(e)(3)(iv) and 63.10(d)(5) do not apply.

3. General Reporting Requirements

a. All requests, reports, applications, submittals, and other communications pursuant to this permit shall be submitted to: Toledo Division of Environmental Services, Air Resources Section, 348 South Erie Street, Toledo, Ohio 43602-1633.

b. All requests, reports, applications, submittals, and other communications to the Administrator pursuant to this permit shall be submitted to: Director Ohio EPA c/o Bob Hodanbosi, Ohio EPA, Lazarus Government Center, P.O. Box 1049, Columbus, OH 43216-1049.

c. If any State requires a submittal that contains all the information required in an application, notification, request, report, statement, or other communication required in this part, the permittee may send the appropriate Regional Office of the EPA a copy of that submittal to satisfy the requirements of this part for that communication.

If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

## V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emission Limitation

      250 ppm by volume (dry basis) of $SO_2$ at zero percent excess air

      Applicable Compliance Method

      The monitoring and record keeping requirements under A.III shall serve as demonstration of compliance with this emission limitation. If required, the procedures outlined under 40 CFR 60.106(f) shall be used to demonstrate compliance.

2. Each CEMS must be audited at least once each calendar quarter. Successive quarterly audits shall occur no closer than 2 months. The audits shall be conducted as follows:

   a. Relative Accuracy Test Audit (RATA). The RATA must be conducted at least once every four calendar quarters. Conduct the RATA as described for the RA test procedure in the applicable PS in Appendix B (e.g., PS 2 for $SO_2$ and $NO_X$). In addition, analyze the appropriate performance audit samples received from USEPA as described in the applicable sampling methods (e.g., Methods 6 and 7).

      i. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

      ii. Personnel from the Toledo Division of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

   b. Cylinder Gas Audit (CGA). If applicable, a CGA may be conducted in three of four calendar quarters, but in no more than three quarters in succession.

   c. Relative Accuracy Audit (RAA). The RAA may be conducted three of four calendar quarters, but in no more than three quarters in succession. To conduct a RAA, follow the procedure described in the applicable PS in Appendix B for the relative accuracy test, except that only three sets of measurement data are required. Analyses of USEPA performance audit samples are also required.

3. [40 CFR Part 63, Subpart UUU]
The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward, however the initial testing may need to be done before that date.

a. [63.1568] DEMONSTRATING COMPLIANCE WITH THE WORK PRACTICE STANDARDS AND EMISSION LIMITATIONS FROM SRUs

i. [63.1568(b)] DEMONSTRATING INITIAL COMPLIANCE
The permittee must:

(a). [63.1568(b)(1)]
Install, operate, and maintain a continuous monitoring system according to the requirements in 40 CFR 63.1572 [See section A.III] and Table 31 [See section A.VI].

(b). [63.1568(b)(3)]
Establish each site-specific operating limit in Table 30 [See section A.VI.] that applies to this emissions unit according to the procedures in Table 32 [See section A.VI].

(c). [63.1568(b)(4)]
Correct the reduced sulfur samples to zero percent excess air using Equation 1 of this section as follows:

(Eq. 1)

Where:
$C_{adj}$ = pollutant concentration adjusted to zero percent oxygen, ppm or g/dscm;
$C_{meas}$ = pollutant concentration measured on a dry basis, ppm or g/dscm;
$20.9_c$ = 20.9 percent oxygen—0.0 percent oxygen (defined oxygen correction basis), percent;
20.9 = oxygen concentration in air, percent;
$\%O_2$ = oxygen concentration measured on a dry basis, percent.

(d). [63.1568(b)(5)]
Demonstrate initial compliance with each emission limitation that applies to this emissions unit according to Table 33 [See section A.VI].

(e). [63.1568(b)(6)]
Demonstrate initial compliance with the work practice standard in 63.1568(a)(3) [See section A.II] by submitting the operation, maintenance, and monitoring plan to the Toledo Division of Environmental Services as part of the notification of compliance status.

(f). [63.1568(b)(7)]

Submit the notification of compliance status containing the results of the initial compliance demonstration according to the requirements in 40 CFR 63.1574 [See section A.IV].

ii. [63.1568(c)] DEMONSTRATING CONTINUOUS COMPLIANCE
The permittee must

(a). [63.1568(c)(1)]
Demonstrate continuous compliance with each emission limitation in Tables 29 and 30 of this subpart that applies to this emissions unit according to the methods specified in Tables 34 and 35 of this subpart.

(b). [63.1568(c)(2)]
Demonstrate continuous compliance with the work practice standard in 63.1568(a)(3) [See section A.II] by complying with the procedures in the operation, maintenance, and monitoring plan.

b. [63.1569(b)] DEMONSTRATING INITIAL COMPLIANCE WITH THE HAP EMISSION LIMITATIONS FROM BYPASS LINES - 40 CFR Part 63, Subpart UUU

i. [63.1569(b)(1)]
If the permittee elects the option in 63.1569(a)(1)(i) [See section A.I.2], the permittee must conduct each performance test for a bypass line according to the requirements in 40 CFR 63.1571 [See section A.V] and under the conditions specified in Table 37 [See section A.VI].

ii. [63.1569(b)(2)]
The permittee must demonstrate initial compliance with each work practice standard in Table 36 [See section A.VI] that applies to this emissions unit according to Table 38 [See section A.VI.].

iii. [63.1569(b)(3)]
The permittee must demonstrate initial compliance with the work practice standard in 63.1569(a)(3) [See section A.II] by submitting the operation, maintenance, and monitoring plan to the Toledo Division of Environmental Services as part of the notification of compliance status.

iv. [63.1569(b)(4)]
The permittee must submit the notification of compliance status containing the results of the initial compliance demonstration according to the requirements in 40 CFR 63.1574 [See section A.IV].

c. [63.1569(c)] DEMONSTRATING CONTINUOUS COMPLIANCE WITH THE WORK PRACTICE STANDARDS FOR BYPASS LINES - 40 CFR Part 63, Subpart UUU

i. [63.1569(c)(1)]

The permittee must demonstrate continuous compliance with each work practice standard in Table 36 [See section A.VI] that applies to this emissions unit according to the requirements in Table 39 [See section A.VI].

ii. [63.1569(c)(2)]
The permittee must demonstrate continuous compliance with the work practice standard in 63.1569(a)(2) [See section A.I.2] by complying with the procedures in the operation, maintenance, and monitoring plan.

d. [63.1571] PERFORMANCE TEST AND OTHER INITIAL COMPLIANCE DEMONSTRATION - 40 CFR Part 63, Subpart UUU

i. [63.1571(a)]
The permittee must conduct performance tests and report the results by no later than 150 days after April 11, 2005 and according to the provisions in 40 CFR 63.6(a)(2) of Subpart A.

(a). [63.1571(a)(1)]
For each emission limitation or work practice standard where initial compliance is not demonstrated using a performance test, opacity observation, or visible emission observation, the permittee must conduct the initial compliance demonstration within 30 calendar days after April 11, 2005.

(b). [63.1571(a)(2)]
For each emission limitation where the averaging period is 30 days, the 30-day period for demonstrating initial compliance begins at 12:00 a.m. on April 11, 2005 and ends at 11:59 p.m., May 11, 2005.

ii. [63.1571(b)] GENERAL REQUIREMENTS FOR PERFORMANCE TESTS AND PERFORMANCE EVALUATIONS
The permittee must:

(a). [63.1571(b)(1)]
Conduct each performance test according to the requirements in 40 CFR 63.7(e)(1).

(b). [63.1571(b)(2)]
Except for opacity and visible emission observations, conduct three separate test runs for each performance test as specified in 40 CFR 63.7(e)(3). Each test run must last at least 1 hour.

(c). [63.1571(b)(3)]
Conduct each performance evaluation according to the requirements in 40 CFR 63.8(e).

(d). [63.1571(b)(4)]

Not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in 40 CFR 63.7(e)(1).

iii. [63.1571(c)] ENGINEERING ASSESSMENT
The permittee may choose to use an engineering assessment to calculate the process vent flow rate, net heating value, TOC emission rate, and total organic HAP emission rate expected to yield the highest daily emission rate when determining the emission reduction or outlet concentration for the organic HAP standard for catalytic reforming units. If an engineering assessment is used, the permittee must document all data, assumptions, and procedures to the satisfaction of the Toledo Division of Environmental Services. An engineering assessment may include the approaches listed in 40 CFR 63.1571(c)(1) through (c)(4) [See section A.V]. Other engineering assessments may be used but are subject to review and approval by the Toledo Division of Environmental Services.

(a). [63.1571(c)(1)]
The permittee may use previous test results provided the tests are representative of current operating practices at the emissions unit, and provided EPA methods or approved alternatives were used;

(b). [63.1571(c)(2)]
The permittee may use bench-scale or pilot-scale test data representative of the process under representative operating conditions;

(c). [63.1571(c)(3)]
The permittee may use maximum flow rate, TOC emission rate, organic HAP emission rate, or organic HAP or TOC concentration specified or implied within a permit limit applicable to the process vent; or

(d). [63.1571(c)(4)]
The permittee may use design analysis based on engineering principles, measurable process parameters, or physical or chemical laws or properties. Examples of analytical methods include, but are not limited to:

(i). [63.1571(c)(4)(i)]
Use of material balances based on process stoichiometry to estimate maximum TOC concentrations;

(ii). [63.1571(c)(4)(ii)]
Calculation of hourly average maximum flow rate based on physical equipment design such as pump or blower capacities; and

(iii). [63.1571(c)(4)(iii)]
Calculation of TOC concentrations based on saturation conditions.

iv. [63.1571(d)] ADJUSTING THE PROCESS OR CONTROL DEVICE MEASURED VALUES WHEN ESTABLISHING AN OPERATING LIMIT
If the permittee does a performance test to demonstrate compliance, the permittee must base the process or control device operating limits for continuous parameter monitoring systems on the results measured during the performance test.

(a). [63.1571(d)(4)]
If the permittee uses continuous parameter monitoring systems, the permittee may adjust one of the monitored operating parameters (flow rate, voltage and secondary current, pressure drop, liquid-to-gas ratio) from the average of measured values during the performance test to the maximum value (or minimum value, if applicable) representative of worst-case operating conditions, if necessary. This adjustment of measured values may be done using control device design specifications, manufacturer recommendations, or other applicable information. The permittee must provide supporting documentation and rationale in the Notification of Compliance Status, demonstrating to the satisfaction of the Toledo Division of Environmental Services, that the affected source complies with the applicable emission limit at the operating limit based on adjusted values.

v. [63.1571(e)]
The permittee may change the established operating limit by meeting the requirements in 63.1571(e)(1) through (2) [See section A.V].

(a). [63.1571(e)(1)]
The permittee may change the established operating limit for a continuous parameter monitoring system by doing an additional performance test, a performance test in conjunction with an engineering assessment, or an engineering assessment to verify that, at the new operating limit, the permittee is in compliance with the applicable emission limitation.

(b). [63.1571(e)(2)]
The permittee must establish a revised operating limit for the continuous parameter monitoring system if changes are made in the process or operating conditions that could affect control system performance or designated conditions are changed after the last performance or compliance tests were done. The permittee can establish the revised operating limit as described in 63.1571(e)(1) [See section A.V].

## VI. Miscellaneous Requirements

1. Continuous $SO_2$ Monitoring - Certified Systems Statement of Certification
A statement of certification of the existing continuous $SO_2$ monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 6. Proof of certification shall be made available to the Toledo Division of Environmental Services upon request.

2. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3 of 40 CFR Part 60 Appendix F Procedure 1 the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following

corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

3. [OAC rule 3745-31-05(D) as established by PTI 04-1046]
Nothing in this permit related to the PMMAP shall be construed to relieve the permittee from its obligation to comply with the requirements of OAC rule 3745-15-06(A) and (B), and OAC rule 3750-25-25 (related to toxic release reporting). Nothing in the permit related to the PMMAP shall modify or limit the Director's authority under OAC rule 3745-15-06(D) to require a preventive maintenance and malfunction abatement plan which is acceptable to the Director if, as the rule states, in the judgement of the Director, such a plan is needed for any emissions units at this facility.

4. [40 CFR Part 63, Subpart UUU]
The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward.

   a. The following tables from 40 CFR Part 63, Subpart UUU are attached:
   Tables 29; 30; 31; 33; 34; 35; 36; 37; 38; 39; 40; 41; 42; 43 and 44.

**TABLE 29 TO Subpart UUU OF PART 63.**—HAP EMISSION LIMITS FOR SRUs

[As stated in § 63.1568(a)(1), you must meet each emission limitation in the following table that applies to you]

| For * * * | You must meet this emission limit for each process vent * * * |
|---|---|
| 1. Each new or existing Claus SRU part of a sulfur recovery plant of 20 long tons per day or more and subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2). | a. 250 ppmv (dry basis) of $SO_2$ at zero percent excess air if you use an oxidation or reduction control system followed by incineration.<br><br>b. 300 ppmv of reduced sulfur compounds calculated as ppmv $SO_2$ (dry basis) at zero percent excess air if you use a reduction control system without incineration. |
| 2. Each new or existing SRU (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2): Option 1 (Elect NSPS). | a. 250 ppmv (dry basis) of $SO_2$ at zero percent excess air if you use an oxidation or reduction control system followed by incineration.<br><br>b. 300 ppmv of reduced sulfur compounds calculated as ppmv $SO_2$ (dry basis) at zero percent excess air if you use a reduction control system without incineration. |
| 3. Each new or existing SRU (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in paragraph (a)(2) of 40 CFR 60.104: Option 2 (TRS limit). | 300 ppmv of total reduced sulfur (TRS) compounds, expressed as an equivalent $SO_2$ concentration (dry basis) at zero percent oxygen. |

**TABLE 30 TO Subpart UUU OF PART 63.**—OPERATING LIMITS FOR HAP EMISSIONS FROM SRUs

[As stated in § 63.1568(a)(2), you must meet each operating limit in the following table that applies to you]

| For * * * | If use this type of control device | You must meet this operating limit* * * |
|---|---|---|
| 1. Each new or existing Claus sulfur recovery unit part of a sulfur recovery plant of 20 long tons per day or more and subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2). | Not applicable ..... | Not applicable. |
| 2. Each new or existing SRU (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2): Option 1 (Elect NSPS). | Not applicable ..... | Not applicable. |
| 3. Each new or existing SRU (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2): Option 2 (TRS limit). | Thermal incinerator ..... | Maintain the daily average combustion zone temperature above the limit established during the performance test; and maintain the daily average oxygen concentration in the vent stream (percent, dry basis) above the limit established during the performance test. |

**TABLE 31 TO Subpart UUU OF PART 63.**—CONTINUOUS MONITORING SYSTEMS FOR HAP EMISSIONS FROM SULFUR RECOVERY UNITS

[As stated in § 63.1568(b)(1), you must meet each requirement in the following table that applies to you]

| For * * * | For this limit * * * | You must install and operate this continuous monitoring system * * * |
|---|---|---|
| 1. Each new or existing Claus sulfur recovery unit part to a sulfur recovery plant of 20 long tons per day and subject to the NSPS for sulfur oxides in 40 CFR 60.104 (1) (2). | a. 250 ppmv (dry basis) of $SO_2$ at zero percent excess air if you use an oxidation or reduction control system followed by incineration. | Continuous emission monitoring system to measure and record the hourly average concentration of $SO_2$ (dry basis) at zero percent excess air for each exhaust stack. This system must include an oxygen monitor for correcting the data for excess air. |
| | b. 300 ppmv of reduced sulfur compounds calculated as ppmv $SO_2$ (dry basis) at zero percent excess air if you use a reduction control system without incineration. | Continuous emission monitoring system to measure and record the hourly average concentration of reduced sulfur and oxygen ($O_2$) emissions. Calculate the reduced sulfur emissions as $SO_2$ (dry basis) at zero percent excess air. *Exception:* You can use an instrument having an air or $SO_2$ dilution and oxidation system to convert the reduced sulfur to $SO_2$ for continuously monitoring and recording the concentration (dry basis) at zero percent excess air of the resultant $SO_2$ instead of the reduced sulfur monitor. The monitor must include an oxygen monitor for correcting the data for excess oxygen. |
| 2. Option 1: Elect NSPS. Each new or existing SRU (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in paragraph (a) (2) of 40 CFR 60.104. | a. 250 ppmv (dry basis) of $SO_2$ at zero percent excess air if you use an oxidation or reduction control system followed by incineration. | Continuous emission monitoring system to measure and record the hourly average concentration of $SO_2$ (dry basis), at zero percent excess air for each exhaust stack. This system must include an oxygen monitor for correcting the data for excess air. |
| | b. 300 ppmv of reduced sulfur compounds calculated as ppmv $SO_2$ (dry basis) at zero percent excess air if you use a reduction control system without incineration. | Continuous emission monitoring system to measure and record the hourly average concentration of reduced sulfur and $O_2$ emissions for each exhaust stack. Calculate the reduced sulfur emissions as $SO_2$ (dry basis), at zero percent excess air. *Exception:* You can use an instrument having an air or $O_2$ dilution and oxidation system to convert the reduced sulfur to $SO_2$ for continuously monitoring and recording the concentration (dry basis) at zero percent excess air of the resultant $SO_2$ instead of the reduced sulfur monitor. The monitor must include an oxygen monitor for correcting the data for excess oxygen. |
| 3. Option 2: TRS limit Each new or existing sulfur recovery unit (Claus or Other type, regardless or size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104 (a) (2). | 300 ppmv of total reduced sulfur (TRS) compounds, expressed as an equivalent $SO_2$ concentration (dry basis) at zero percent oxygen. | Continuous emission monitoring system to measure and record the hourly average concentration of TRS for each exhaust stack. This monitor must include an oxygen monitor for correcting the data for excess oxygen; or continuous parameter monitoring systems to measure and record the combustion zone temperature of each thermal incinerator and the oxygen content (percent, dry basis) in the vent stream of the incinerator. |

**TABLE 33 TO Subpart UUU OF PART 63.**—INITIAL COMPLIANCE WITH HAP EMISSION LIMITS FOR SRUs

[As stated in § 63.1568(b)(5), you must meet each requirement in the following table that applies to you]

| For * * * | For the following emission limit * * * | You have demonstrated initial compliance if * * * |
|---|---|---|
| 1. Each new or existing Clause sulfur recovery unit part of a sulfur recovery plant of 20 long tons per day and subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2). | a. 250 ppmv (dry basis) SO2 at zero percent excess air if you use an oxidation or reduction control system followed by incineration. | You have already conducted a performance test to demonstrate initial compliance with the NSPS and the hourly average SO2 emissions measured by the continuous emission monitoring system are less than or equal to 250 ppmv (dry basis) at zero percent excess air. As part of the Notification of Compliance Status, you must certify that your vent meets the SO2 limit. You are not required to do another performance test to demonstrate initial compliance. You have already conducted a performance evaluation to demonstrate initial compliance with the applicable performance specification. As part of your Notification of Compliance Status, you must certify that your continuous emission monitoring system meets the applicable requirements in § 63.1572. You are not required to do another performance evaluation to demonstrate initial compliance. |
| | b. 300 ppmv of reduced sulfur compounds calculated as ppmv SO2 (dry basis) at zero percent excess air if you use a reduction control system without incineration. | You have already conducted a performance test to demonstrate initial compliance with the NSPS and the hourly average SO2 emissions measured by your continuous emission monitoring system are less than or equal to 250 ppmv (dry basis) at zero percent excess air. As part of the Notification of Compliance Status, you must certify that your vent meets the SO2 limit. You are not required to do another performance test do demonstrate initial compliance. |
| 2. Option 1: Elect NSPS. Each new or existing SRU (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2). | a. 250 ppmv (dry basis) of SO2 at zero percent excess air if you use an oxidation control system followed by incineration. | You have already conducted a performance evaluation to demonstrate initial compliance with the applicable performance specification. As part of your Notification of Compliance Status, you must certify that your continuous emission monitoring system meets the applicable requirements in § 63.1572. You are not required to do another performance evaluation to demonstrate initial compliance.<br><br>The hourly average SO2 emissions measured by the continuous emission monitoring system over the 24-hour period of the initial performance test are not more than 250 ppvm (dry basis) at zero percent excess air; and your performance evaluation shows the monitoring system meets the applicable requirements in § 63.1572. |
| | b. 300 ppmv of reduced sulfur compounds calculated as ppmv SO2 (dry basis) at zero percent excess air if you use a reduction control system without incineration. | The hourly average reduced sulfur emissions measured by the continuous emission monitoring system over the 24-hour period of the performance test no more than 300 ppmv, calculated as ppmv SO2 (dry basis) at zero percent excess air; and your performance evaluation shows the continuous emission monitoring system meets the applicable requirements in § 63.1572. |

*(Continued on next page)*

Emissions Unit ID: **P009**

**(Cont.) TABLE 33 TO Subpart UUU OF PART 63.**—INITIAL COMPLIANCE WITH HAP EMISSION LIMITS FOR SULFUR RECOVERY UNITS

[As stated in § 63.1568(b)(5), you must meet each requirement in the following table that applies to you]

| For * * * | For the following emission limit * * * | You have demonstrated initial compliance if * * * |
|---|---|---|
| 3. Option 2: TRS limit. Each new or existing SRU (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2). | 300 ppmv of TRS compounds expressed as an equivalent $SO_2$ concentration (dry basis) at zero percent oxygen. | If you do not use a continuous emission monitoring system, the average TRS emissions measured using Method 15 over the period of the initial performance test are less than or equal to 300 ppmv expressed as equivalent SO2 concentration (dry basis) at zero percent oxygen. If you use a continuous emission monitoring system the hourly average TRS emissions measured by the continuous emission monitoring system over the 24-hour period of the performance test are no more than 300 ppmv expressed as an equivalent $SO_2$ concentration (dry basis) at zero percent oxygen; and your performance evaluation shows the continuous emission monitoring system meets the applicable requirements in § 63.1572. |

**TABLE 34 TO Subpart UUU OF PART 63.**—CONTINUOUS COMPLIANCE WITH HAP EMISSION LIMITS FOR SULFUR RECOVERY UNITS

[As stated in § 63.1568(c)(1), you must meet each requirement in the following table that applies to you.]

| For * * * | For this emission limit * * * | You must demonstrate continuous compliance by * * * |
|---|---|---|
| 1. Each new or existing Claus sulfur recovery unit part of a sulfur recovery plant of 20 long tons per or more and subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2). | a. 250 ppmv (dry basis) SO2 at zero percent excess air if you use an oxidation or reduction control system followed by incineration. | Collecting the hourly average SO2 monitoring data (dry basis, percent excess air) according to § 63.1572; maintaining the hourly average SO2 concentration at or below the applicable limit; determining and recording each 12-hour average SO2 day concentration; and reporting any 12-hour average SO2 concentration greater than the applicable emission limitation in the compliance report required in § 63.1575. |
| | b. 300 ppmv of reduced sulfur compounds calculated as ppmv (dry basis) SO2 at zero percent excess air if you use a reduction control system without incineration. | Collecting the hourly average reduced sulfur and O2 data according to § 63.1572; and maintaining the hourly average concentration of reduced sulfur at or below the applicable limit; and determining and recording each 12-hour average concentration of reduced sulfur; and reporting any 12-hour average concentration of reduced sulfur greater than the applicable emission limitation in the compliance report required in § 63.1575. |
| 2. Option 1: Elect NSPS Each new or existing SRU (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2). | a. 250 ppmv (dry basis) of SO2 at zero percent excess air (for oxidation or reduction system followed by incineration). | Collecting the hourly average SO2 monitoring data (dry basis, percent excess air) according to § 63.1572; maintaining the hourly average SO2 concentration at or below the applicable limit; determining and recording each 12-hour average SO2 concentration; and reporting any 12-hour average SO2 concentration greater than the applicable emission limitation in the compliance report required in § 63.1575. |
| | b. 300 ppmv of reduced sulfur compounds calculated as ppmv SO2 (dry basis) at zero percent excess air (for reduction control system without incineration). | Collecting the hourly average reduced sulfur (and air or O2 dilution and oxidation data) according to § 63.1572; maintaining the hourly average SO2 concentration at or below the applicable limit; reducing the monitoring data to 12-hour averages; and reporting any 12-hour average SO2 concentration greater than the applicable limit in the compliance report required by § 63.1575. |
| 3. Option 2: TRS limit Each new or existing SRU (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2). | 300 ppmv of TRS compounds, expressed as an SO2 concentration (dry basis) at zero percent oxygen or reduced sulfur compounds calculated as ppmv SO2 (dry basis) at zero percent excess air. | Collecting the hourly average TRS monitoring data according to § 63.1572, if you use a continuous emission monitoring system; maintaining the hourly average concentration of TRS at or below the applicable limit; reducing the TRS monitoring data to 12-hour averages; reporting any 12-hour average TRS greater than the applicable limit in the compliance report required by § 63.1575; and maintaining the hourly average concentration of TRS below the applicable limit if you use continuous parameter monitoring systems. |

**TABLE 35 TO Subpart UUU OF PART 63.**—CONTINUOUS COMPLIANCE WITH OPERATING LIMITS FOR HAP EMISSIONS FROM SRUs

[As stated in § 63.1568(c)(1), you must meet each requirement in the following table that applies to you]

| For * * * | For this operating limit * * * | You must demonstrate continuous compliance by * * * |
|---|---|---|
| 1. Each new or existing Claus sulfur recovery unit part of a sulfur recovery plant of 20 long tons per day or more and subject to the NSPS for sulfur oxides in paragraph 40 CFR 60.104(a)(2). | Not applicable ..... | Meeting the requirements of Table 34 of this subpart. |
| 2. Option 1: Elect NSPS Each new or existing SRU (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2). | Not applicable ..... | Meeting the requirements of Table 34 of this subpart. |
| 3. Option 2: TRS limit Each new or existing SRU (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2) | a. Maintain the daily average combustion zone temperature above the level established during the performance test. | Collecting the hourly and daily average temperature monitoring data according to § 63.1572; and maintaining the daily average combustion zone temperature at or above the limit established during the performance test. |
| | b. The daily average oxygen concentration in the vent stream (percent, dry basis) must not fall below the level established during the performance test. | Collecting the hourly and daily average $O_2$ monitoring data according to § 63.1572; and maintaining the average $O_2$ concentration above the level established during the performance test. |

**TABLE 36 TO Subpart UUU OF PART 63.**—WORK PRACTICE STANDARDS FOR HAP EMISSIONS FROM BYPASS LINES

[As stated in § 63.1569(a)(1), you must meet each work practice standard in the following table that applies to you]

| Option | You must meet one of these equipment standards * * * |
|---|---|
| 1. Option 1 ..... | Install and operate a device (including a flow indicator, level recorder, or electronic valve position monitor) to continuously detect, at least every hour, whether flow is present in the bypass line. Install the device at or as near as practical to the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere. |
| 2. Option 2 ..... | Install a car-seal or lock-and-key device placed on the mechanism by which the bypass device flow position is controlled (e.g., valve handle, damper level) when the bypass device is in the closed position such that the bypass line valve cannot be opened without breaking the seal or removing the device. |
| 3. Option 3 ..... | |
| 4. Option 4 ..... | Seal the bypass line by installing a solid blind between piping flanges. |
| | Vent the bypass line to a control device that meets the appropriate requirements in this subpart. |

**TABLE 37 TO Subpart UUU OF PART 63.**—REQUIREMENTS FOR PERFORMANCE TESTS FOR BYPASS LINES

[As stated in § 63.1569(b)(1), you must meet each requirement in the following table that applies to you]

| For this standard . . . | You must . . . |
|---|---|
| 1. Option 1: Install and operate a flow indicator, level recorder, or electronic valve position monitor. | Record during the performance test for each type of control device whether the flow indicator, level recorder, or electronic valve position monitor was operating and whether flow was detected at any time during each hour of level the three runs comprising the performance test. |

**TABLE 38 TO Subpart UUU OF PART 63.**—INITIAL COMPLIANCE WITH WORK PRACTICE STANDARDS FOR HAP EMISSIONS FROM BYPASS LINES

[As stated in § 63.1569(b)(2), you must meet each requirement in the following table that applies to you]

| For * * * | For this work practice standard * * * | You have demonstrated initial compliance if * * * |
|---|---|---|
| 1. Each new or existing bypass line associated with a catalytic cracking unit, catalytic reforming unit, or SRU. | a. Option 1: Install and operate a device (including a flow indicator, level recorder, or electronic valve position monitor) to continuously detect, at least every hour, whether flow is present in the bypass line. Install the device at or as near as practical to the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere. | The installed equipment operates properly during each run of the performance test and no flow is present in the line during the test. |
| | b. Option 2: Install a car-seal or lock-and-key device placed on the mechanism by which the bypass device flow position is controlled (e.g., valve handle, damper level) when the bypass device is in the closed position such that the bypass line valve cannot be opened without breaking the seal or removing the device. | As part of the notification of compliance status, you certify that you installed the equipment, the equipment was operational by your compliance date, and you identify what equipment was installed. |
| | c. Option 3: Seal the bypass line by installing a solid blind between piping flanges. | See item 1.b. of this table. |
| | d. Option 4: Vent the bypass line to a control device that meets the appropriate requirements in this subpart. | See item 1.b. of this table. |

**TABLE 39 TO Subpart UUU OF PART 63.**—CONTINUOUS COMPLIANCE WITH WORK PRACTICE STANDARDS FOR HAP EMISSIONS FROM BYPASS LINES

[As stated in § 63.1569(c)(1), you must meet each requirement in the following table that applies to you]

| If you elect this standard * * * | You must demonstrate continuous compliance by * * * |
|---|---|
| 1. Option 1: Flow indicator, level recorder, or electronic valve position monitor. | Continuously monitoring and recording whether flow is present in the bypass line; visually inspecting the device at least once every hour if the device is not equipped with a recording system that provides a continuous record; and recording whether the device is operating properly and whether flow is present in the bypass line. |
| 2. Option 2: Car-seal or lock-and-key device ..... | Visually inspecting the seal or closure mechanism at least once every month; and recording whether the bypass line valve is maintained in the closed position and whether flow is present in the line. |
| 3. Option 3: Solid blind flange ..... | Visually inspecting the blind at least once a month; and recording whether the blind is maintained in the correct position such that the vent stream cannot be diverted through the bypass line. |
| 4. Option 4: Vent to control device ..... | Monitoring the control device according to appropriate subpart requirements. |
| 5. Option 1, 2, 3, or 4 ..... | Recording and reporting the time and duration of any bypass. |

**TABLE 40 TO Subpart UUU OF PART 63.**—REQUIREMENTS FOR INSTALLATION, OPERATION, AND MAINTENANCE OF CONTINUOUS OPACITY MONITORING SYSTEMS AND CONTINUOUS EMISSION MONITORING SYSTEMS

[As stated in § 63.1572(a)(1) and (b)(1), you must meet each requirement in the following table that applies to you]

| This type of continuous opacity or emission monitoring system * * * | Must meet these requirements * * * |
|---|---|
| 1. Continuous opacity monitoring system ..... | Performance specification 1 (40 CFR Part 60, Appendix B). |
| 2. CO continuous emission monitoring system ..... | Performance specification 4 (40 CFR Part 60, Appendix B); span value of 1,000 ppm; and procedure 1 (40 CFR Part 60, Appendix F) except relative accuracy test audits are required annually instead of quarterly. |
| 3. CO continuous emission monitoring system used to demonstrate emissions average under 50 ppm (dry basis). | Performance specification 4 (40 CFR Part 60, Appendix B); and span value of 100 ppm. |
| 4. $SO_2$ continuous emission monitoring for SRU with oxidation control system or reduction control system; this monitor must include an $O_2$ monitor for correcting the data for excess air. | Performance specification 2 (40 CFR Part 60, Appendix B); span values of 500 ppm $SO_2$ and 10 percent $O_2$; use Methods 6 or 6C and 3A or 3B (40 CFR Part 60, Appendix A) for certifying $O_2$ monitor; and procedure 1 (40 CFR Part 60, Appendix F) except relative accuracy test audits are required annually instead of quarterly. |
| 5. Reduced sulfur and $O_2$ continuous emission monitoring system for SRU with reduction control system not followed by incineration; this monitor must include an $O_2$ monitor for correcting the data for excess air unless exempted. | Performance specification 5 (40 CFR Part 60, Appendix B), except calibration drift specification is 2.5 percent of the span value instead of 5 percent; 450 ppm reduced sulfur and 10 percent $O_2$; use Methods 15 or 15A and 3A or 3B (40 CFR Part 60, Appendix A) for certifying $O_2$ monitor; if Method 3A or 3B yields $O_2$ concentrations below 0.25 percent during the performance evaluation, the $O_2$ concentration can be assumed to be zero and the $O_2$ monitor is not required; and procedure 1 (40 CFR Part 60, Appendix F), except relative accuracy test audits, are required annually instead of quarterly. |
| 6. Instrument with an air or O2 dilution and oxidation system to convert reduced sulfur to $SO_2$ for continuously monitoring the concentration of $SO_2$ instead of reduced sulfur monitor and $O_2$ monitor. | Performance specification 5 (40 CFR Part 60, Appendix B); span value of 375 ppm $SO_2$ and 10 percent $O_2$; use Methods 15 or 15A and 3A or 3B for certifying $O_2$ monitor; and procedure 1 (40 CFR part 60, Appendix F), except relative accuracy test audits, are required annually instead of quarterly. |
| 7. TRS continuous emission monitoring system for SRU; this monitor must include an $O_2$ monitor for correcting the data for excess air. | Performance specification 5 (40 CFR Part 60, Appendix B). |
| 8. $O_2$ monitor for oxygen concentration ..... | If necessary due to interferences, locate the oxygen sensor prior to the introduction of any outside gas stream; performance specification 3 (40 CFR Part 60, Appendix B; span value for $O_2$ sensor is 10 percent; and procedure 1 (40 CFR Part 60, Appendix F), except relative accuracy test audits, are required annually instead of quarterly. |

**TABLE 41 TO Subpart UUU OF PART 63.**—REQUIREMENTS FOR INSTALLATION, OPERATION, AND MAINTENANCE OF CONTINUOUS PARAMETER MONITORING SYSTEMS—Continued

[As stated in § 63.1572(c)(1), you must meet each requirement in the following table that applies to you]

| If you use a continuous parameter monitoring system to measure and record * * * | You must * * * |
|---|---|
| 1. Voltage and secondary current or total power input. | At least monthly, inspect all components of the continuous parameter monitoring system for integrity and all electrical connections for continuity; and record the results of each inspection. |
| 2. Pressure drop [1] ..... | Locate the pressure sensor(s) in a position that provides a representative measurement of the pressure; minimize or eliminate pulsating pressure, vibration, and internal and external corrosion; use a gauge with an accuracy ± 2 percent over the operating range; check pressure tap for plugs at least once a week; using a manometer, check gauge calibration quarterly and transducer calibration monthly; for a semi-regenerative catalytic reforming unit, you can check the calibration quarterly and monthly or prior to regeneration, whichever is longer; record the results of each calibration; conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range, or install a new pressure sensor; at least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage; and record the results of each inspection. |
| 3. Air flow rate, gas flow rate, or total water (or scrubbing liquid) flow rate. | Locate the flow sensor(s) and other necessary equipment such as straightening vanes in a position that provides representative flow; use a flow rate sensor with an accuracy within ±5 percent; reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances; conduct a flow sensor calibration check at least semiannually; for a semi-regenerative catalytic reforming unit, you can check the calibration at least semiannually or prior to regeneration, whichever is longer; record the results of each calibration; if you elect to comply with Option 3 (Ni lb/hr) or Option 4 (Ni lb/1,000 lbs of coke burn-off) for the HAP metal emission limitations in § 63.1564, install the continuous parameter monitoring system for gas flow rate as close as practical to the continuous opacity monitoring system; and if you don't use a continuous opacity monitoring system, install the continuous parameter monitoring system for gas flow rate as close as practical to the control device. |
| 4. Combustion zone temperature ..... | Install the temperature sensor in the combustion zone or in the ductwork immediately downstream of the combustion zone before any substantial heat exchange occurs; locate the temperature sensor in a position that provides a representative temperature; use a temperature sensor with an accuracy of ±1 percent of the temperature being measured, expressed in degrees Celsius (C) or ±0.5 degrees C, whichever is greater; shield the temperature sensor system from electromagnetic interference and chemical contaminants; if you use a chart recorder, it must have a sensitivity in the minor division of at least 20 degrees Fahrenheit; perform an electronic calibration at least semiannually according to the procedures in the manufacturer's owners manual; following the electronic calibration, conduct a temperature sensor validation check, in which a second or redundant temperature sensor placed nearby the process temperature sensor must yield a reading within 16.7 degrees C of the process temperature sensor's reading; record the results of each calibration and validation check; conduct calibration and validation checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range, or install a new temperature sensor; and at least monthly, inspect all components for integrity and all electrical connections for continuity, oxidation, and galvanic corrosion. |
| 5. pH ..... | Locate the pH sensor in a position that provides a representative measurement of pH; ensure the sample is properly mixed and representative of the fluid to be measured; check the pH meter's calibration on at least two points every 8 hours of process operation; at least monthly, inspect all components for integrity and all electrical components for continuity; record the results of each inspection; and if you use pH strips to measure the pH of the water exiting a wet scrubber as an alternative to a continuous parameter monitoring system, you must use pH strips with an accuracy of ±10 percent. |
| 6. HCl concentration ..... | Use a colorimetric tube sampling system with a printed numerical scale in ppmv, a standard measurement range of 1 to 10 ppmv (or 1 to 30 ppmv if applicable), and a standard deviation for measured values of no more than ±15 percent. System must include a gas detection pump and hot air probe if needed for the measurement range. |

**TABLE 42 TO Subpart UUU OF PART 63.—ADDITIONAL** INFORMATION FOR INITIAL NOTIFICATION OF COMPLIANCE STATUS

[As stated in § 63.1574(d), you must meet each requirement in the following table that applies to you]

| For * * * | You must provide this additional information * * * |
|---|---|
| 1. Identification of affected sources and emission points. | Nature, size, design, method of operation, operating design capacity of each affected source; identify each emission point for each HAP; identify any affected source or vent associated with an affected source not subject to the requirements of Subpart UUU. |
| 2. Initial compliance ..... | Identification of each emission limitation you will meet for each affected source, including any option you select (i.e., NSPS, PM or Ni, flare, percent reduction, concentration, options for bypass lines); if applicable, certification that you have already conducted a performance test to demonstrate initial compliance with the NSPS for an affected source; certification that the vents meet the applicable emission limit and the continuous opacity or that the emission monitoring system meets the applicable performance specification; if applicable, certification that you have installed and verified the operational status of equipment by your compliance date for each bypass line that meets the requirements of Option 2, 3, or 4 in § 63.1569 and what equipment you installed; identification of the operating limit for each affected source, including supporting documentation; if your affected source is subject to the NSPS, certification of compliance with NSPS emission limitations and performance specifications; a brief description of performance test conditions (capacity, feed quality, catalyst, etc.); an engineering assessment (if applicable); and if applicable, the flare design (e.g., steam-assisted, air-assisted, or non-assisted), all visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the Method 22 test. |
| 3. Continuous compliance ..... | Each monitoring option you elect; and identification of any unit or vent for which monitoring is not required; and the definition of ''operating day.'' (This definition, subject to approval by the applicable permitting authority, must specify the times at which a 24-hr operating day begins and ends.) |

**TABLE 43 TO Subpart UUU OF PART 63.**—REQUIREMENTS FOR REPORTS

[As stated in § 63.1575(a), you must meet each requirement in the following table that applies to you]

| You must submit a(n) * * * | The report must contain * * * | You must submit the report * * * |
|---|---|---|
| 1. Compliance report ..... | If there are not deviations from any emission limitation or work practice standard that applies to you, a statement that there were no deviations from the standards during the reporting period and that no continuous opacity monitoring system or continuous emission monitoring system was inoperative, inactive, out-of-control, repaired, or adjusted; and if you have a deviation from any emission limitation or work practice standard during the reporting period, the report must contain the information in § 63.1575(d) or (e) | Semiannually according to the requirements in § 63.1575(b). |

**Table 44 to Subpart UUU of Part 63 -** Applicability of NESHAP General Provisions to Subpart UUU
As stated in §63.1577, you must meet each requirement in the following table that applies to you.

| Citation | Subject | Applies to Subpart UUU | Explanation |
|---|---|---|---|
| §63.1 | Applicability | Yes | Except that Subpart UUU specifies calendar or operating day. |
| §63.2 | Definitions | Yes | |
| §63.3 | Units and Abbreviations | Yes | |
| §63.4 | Prohibited Activities | Yes | |
| §63.5(a)-(c) | Construction and Reconstruction | Yes | In §63.5(b)(4), replace the reference to §63.9 with §63.9(b)(4) and (5). |
| §63.5(d)(1)(i) | Application for Approval of Construction or Reconstruction - General Application Requirements | Yes | Except, Subpart UUU specifies the application is submitted as soon as practicable before startup but no later than 90 days (rather than 60) after the promulgation date where construction or reconstruction had commenced and initial startup had not occurred before promulgation. |
| §63.5(d)(1)(ii) | | Yes | Except that emission estimates specified in §63.5(d)(1)(ii)(H) are not required. |
| §63.5(d)(1)(iii) | | No | Subpart UUU specifies submission of notification of compliance status. |
| §63.5(d)(2) | | No | |
| §63.5(d)(3) | | Yes | Except that §63.5(d)(3)(ii) does not apply. |
| §63.5(d)(4) | | Yes | |
| §63.5(e) | Approval of Construction or Reconstruction | Yes | |
| §63.5(f)(1) | Approval of Construction or Reconstruction Based on State Review | Yes | |
| §63.5(f)(2) | | Yes | Except that 60 days is changed to 90 days and cross-reference to §63.9(b)(2) does not apply. |
| §63.6(a) | Compliance with Standards and Maintenance - Applicability | Yes | |
| §63.6(b)(1)-(4) | Compliance Dates for New and Reconstructed Sources | Yes | |
| §63.6(b)(5) | | Yes | Except that Subpart UUU specifies different compliance dates for sources. |
| §63.6(b)(6) | [Reserved] | Not applicable | |

| | | | |
|---|---|---|---|
| §63.6(b)(7) | Compliance Dates for New and Reconstructed Area Sources That Become Major | Yes | |
| §63.6(c)(1)-(2) | Compliance Dates for Existing Sources | Yes | Except that Subpart UUU specifies different compliance dates for sources subject to Tier II gasoline sulfur control requirements. |
| §63.6(c)(3)-(4) | [Reserved] | Not applicable | |
| §63.6(c)(5) | Compliance Dates for Existing Area Sources That Become Major | Yes | |
| §63.6(d) | [Reserved] | Not applicable | |
| §63.6(e)(1)-(2) | Operation and Maintenance Requirements | Yes | |
| §63.6(e)(3)(i)-(iii) | Startup, Shutdown, and Malfunction Plan | Yes | |
| §63.6(e)(3)(iv) | | Yes | Except that reports of actions not consistent with plan are not required within 2 and 7 days of action but rather must be included in next periodic report. |
| §63.6(e)(3)(v)-(viii) | | Yes | The owner or operator is only required to keep the latest version of the plan. |
| §63.6(f)(1)-(2)(iii)(C) | Compliance with Emission Standards | Yes | |
| §63.6(f)(2)(iii)(D) | | No | |
| §63.6(f)(2)(iv)-(v) | | Yes | |
| §63.6(f)(3) | | Yes | |
| §63.6(g) | Alternative Standard | Yes | |
| §63.6(h) | Opacity/VE Standards | Yes | |
| §63.6(h)(2)(i) | Determining Compliance with Opacity/VE Standards | No | Subpart UUU specifies methods. |
| §63.6(h)(2)(ii) | [Reserved] | Not applicable | |
| §63.6(h)(2)(iii) | | Yes | |
| §63.6(h)(3) | [Reserved] | Not applicable | |
| §63.6(h)(4) | Notification of Opacity/VE Observation Date | Yes | Applies to Method 22 tests. |
| §63.6(h)(5) | Conducting Opacity/VE Observations | No | |
| §63.6(h)(6) | Records of Conditions During Opacity/VE Observations | Yes | Applies to Method 22 observations. |
| §63.6(h)(7)(i) | Report COM Monitoring Data from Performance Test | Yes | |
| §63.6(h)(7)(ii) | Using COM Instead of Method 9 | No | |

| | | | |
|---|---|---|---|
| §63.6(h)(7)(iii) | Averaging Time for COM during Performance Test | Yes | |
| §63.6(h)(7)(iv) | COM Requirements | Yes | |
| §63.6(h)(8) | Determining Compliance with Opacity/VE Standards | Yes | |
| §63.6(h)(9) | Adjusted Opacity Standard | Yes | |
| §63.6(i)(1)-(14) | Extension of Compliance | Yes | Not applicable to an affected source with Tier II compliance date. May be applicable to an affected source exempt from Tier II rule. |
| §63.6(i)(15) | [Reserved] | Not applicable | |
| §63.6(i)(16) | | Yes | |
| §63.6(j) | Presidential Compliance Exemption | Yes | |
| §63.7(a)(1) | Performance Test Requirements-Applicability | Yes | Except that Subpart UUU specifies the applicable test and demonstration procedures. |
| §63.7(a)(2) | Performance Test Dates | No | Test results must be submitted in the Notification of Compliance Status report due 150 days after the compliance date. |
| §63.7(a)(3) | Section 114 Authority | Yes | |
| §63.7(b) | Notifications | Yes | Except that Subpart UUU specifies notification at least 30 days prior to the scheduled test date rather than 60 days. |
| §63.7(c) | Quality Assurance Program/Site-Specific Test Plan | Yes | |
| §63.7(d) | Performance Test Facilities | Yes | |
| §63.7(e) | Conduct of Tests | Yes | |
| §63.7(f) | Alternative Test Method | Yes | |
| §63.7(g) | Data Analysis, Record Keeping, Reporting | Yes | Except performance test reports must be submitted with notification of compliance status due 150 days after the compliance date. |
| §63.7(h) | Waiver of Tests | Yes | |
| §63.8(a)(1) | Monitoring Requirements - Applicability | Yes | |
| §63.8(a)(2) | Performance Specifications | Yes | |
| §63.8(a)(3) | [Reserved] | Not appli-cable | |
| §63.8(a)(4) | Monitoring with Flares | Yes | |
| §63.8(b)(1) | Conduct of Monitoring | Yes | |
| §63.8(b)(2)-(3) | Multiple Effluents and Multiple Monitoring Systems | Yes | Subpart UUU specifies the required monitoring locations. |
| §63.8(c)(1) | Monitoring System Operation and Maintenance | Yes | |

| | | | |
|---|---|---|---|
| §63.8(c)(1)(i)-(ii) | Startup, Shutdown, and Malfunctions | Yes | Except that Subpart UUU specifies that reports are not required if actions are consistent with the SSM plan, unless requested by the permitting authority. If actions are not consistent, actions must be described in next compliance report. |
| §63.8(c)(1)(iii) | Compliance with Operation and Maintenance Requirements | Yes | |
| §63.8(c)(2)-(3) | Monitoring System Installation | Yes | Except that Subpart UUU specifies that for continuous parameter monitoring systems, operational status verification includes completion of manufacturer written specifications or installation operation, and calibration of the system or other written procedures that provide adequate assurance that the equipment will monitor accurately. |
| §63.8(c)(4) | Continuous Monitoring System Requirements | No | Subpart UUU specifies operational requirements. |
| §63.8(c)(4)(i)-(ii) | Continuous Monitoring System Requirements | Yes | Except that these requirements apply only to a continuous opacity monitoring system or a continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or $SO_2$ limits. |
| §63.8(c)(5) | COM Minimum Procedures | Yes | |
| §63.8(c)(6) | CMS Requirements | No | Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or $SO_2$ limits. |
| §63.8(c)(7)-(8) | CMS Requirements | Yes | |
| §63.8(d) | Quality Control Program | Yes | Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or $SO_2$ limits. |
| §63.8(e) | CMS Performance Evaluation | Yes | Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or $SO_2$ limits. Results are to be submitted as part of the Notification of Compliance Status due 150 days after the compliance date. |
| §63.8(f)(1)-(5) | Alternative Monitoring Method | Yes | Except that Subpart UUU specifies procedures for requesting alternative monitoring systems and alternative parameters. |

| | | | |
|---|---|---|---|
| §63.8(f)(6) | Alternative to Relative Accuracy Test | Yes | Applicable to continuous emission monitoring systems if performance specification requires a relative accuracy test audit. |
| §63.8(g)(1)-(4) | Reduction of Monitoring Data | Yes | Applies to a continuous opacity monitoring system or continuous emission monitoring system. |
| §63.8(g)(5) | Data Reduction | No | Subpart UUU specifies requirements. |
| §63.9(a) | Notification Requirements - Applicability | Yes | Duplicate Notification of Compliance Status report to the Regional Administrator may be required. |
| §63.9(b)(1)-(5) | Initial Notifications | Yes | Except that notification of construction or reconstruction is to be submitted as soon as practicable before startup but no later than 30 days (rather than 60 days) after the effective date if construction or reconstruction had commenced but startup had not occurred before the effective date. |
| §63.9(c) | Request for Extension of Compliance | Yes | |
| §63.9(d) | New Source Notification for Special Compliance Requirements | Yes | |
| §63.9(e) | Notification of Performance Test | Yes | Except that notification is required at least 30 days before test. |
| §63.9(f) | Notification of VE/Opacity Test | Yes | |
| §63.9(g) | Additional Notification Requirements for Sources with Continuous Monitoring Systems | Yes | Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or $SO_2$ limits. |
| §63.9(h) | Notification of Compliance Status | Yes | Except that Subpart UUU specifies the notification is due no later than 150 days after compliance date. |
| §63.9(i) | Adjustment of Deadlines | Yes | |
| §63.9(j) | Change in Previous Information | Yes | |
| §63.10(a) | Record Keeping and Reporting-Applicability | Yes | |
| §63.10(b) | Records | Yes | Except that §63.10(b)(2)(xiii) applies if you use a continuous emission monitoring system to meet the NSPS or you elect to meet the NSPS, CO, or $SO_2$ reduced sulfur limit and the performance evaluation requires a relative accuracy test audit. |

| | | | |
|---|---|---|---|
| §63.10(c)(1)-(6), (9)-(15) | Additional Records for Continuous Monitoring Systems | Yes | Except that these requirements apply if you use a continuous opacity monitoring system or a continuous emission monitoring system to meet the NSPS or elect to meet the NSPS opacity, CO, or $SO_2$ limits. |
| §63.10(c)(7)-(8) | Records of Excess Emissions and Exceedances | No | Subpart UUU specifies requirements. |
| §63.10(d)(1) | General Reporting Requirements | Yes | |
| §63.10(d)(2) | Performance Test Results | No | Subpart UUU requires performance test results to be reported as part of the Notification of Compliance Status due 150 days after the compliance date. |
| §63.10(d)(3) | Opacity or VE Observations | Yes | |
| §63.10(d)(4) | Progress Reports | Yes | |
| §63.10(d)(5)(i) | Startup, Shutdown, and Malfunction Reports | Yes | Except that reports are not required if actions are consistent with the SSM plan, unless requested by permitting authority. |
| §63.10(d)(5)(ii) | | Yes | Except that actions taken during a startup, shut- down, or malfunction that are not consistent with the plan do not need to be reported within 2 and 7 days of commencing and completing the action, respectively, but must be included in the next periodic report. |
| §63.10(e)(1)-(2) | Additional CMS Reports | Yes | Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or $SO_2$ limits. Reports of performance evaluations must be submitted in Notification of Compliance Status. |
| §63.10(e)(3) | Excess Emissions/CMS Performance Reports | No | Subpart UUU specifies the applicable requirements. |
| §63.10(e)(4) | COMS Data Reports | Yes | |
| §63.10(f) | Record Keeping/ Reporting Waiver | Yes | |
| §63.11 | Control Device Requirements | Yes | Applicable to flares. |
| §63.13 | Addresses | Yes | |
| §63.14 | Incorporation by Reference | Yes | |
| §63.15 | Availability of Information | Yes | |

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| P010 - This emissions unit is a distillation tower and vacuum distillation tower identified as Crude 2 and Crude Vacuum 2. Vapors extracted from Crude Vacuum 2 are burned in the Crude Vac 2 Furnace (B019). | OAC rule 3745-18-54(W)(2) | 0.40 pound of sulfur dioxide ($SO_2$) per ton of actual process weight input |
| | OAC rule 3745-21-09(M)(1) | See section A.I.2.a. |
| | OAC rule 3745-21-09(T) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart A | See sections A.I.2.c and A.I.2.d. |
| | 40 CFR Part 63, Subpart CC<br>40 CFR 63.648 | See sections A.I.2.d and A.I.2.e. |
| | miscellaneous process vents<br>40 CFR Part 63, Subpart CC | See section A.I.2.f. |

**2. Additional Terms and Conditions**

2.a The permittee shall control the emissions from the vacuum producing system by piping the vapors to the firebox of the Crude/Vac 2 Furnace (B019).

2.b Refer to Part II of this permit for the state requirements for equipment leaks found in sections A.I.2, A.II, A.III, A.IV, and A.V, referencing OAC rule 3745-21-09(T).

2.c 40 CFR Part 63, Subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 63.

2.d Table 6 of 40 CFR Part 63, Subpart CC specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.e Refer to Part II of this permit for the applicable equipment leak provisions found in sections A.I.2, A.II, A.III, A.IV, and A.V, referencing 40 CFR Part 60, Subpart VV.

2.f Refer to Part II of this permit for the miscellaneous process vent provisions found in sections A.I.2, A.II, A.III, A.IV, and A.V, referencing 40 CFR Part 63, Subpart CC.

## II. Operational Restrictions

1. See the applicable sections in Part II for equipment leaks in A.II, referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. See the applicable sections in Part II for miscellaneous process vents in A.II, referencing 40 CFR Part 63, Subpart CC.

## III. Monitoring and/or Record Keeping Requirements

1. See the applicable sections in Part II for equipment leaks in A.III, referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. The permittee shall monitor and record the following at least once per day for Crude Vacuum 2:

   a. daily flow of the off-gas in cubic feet from Crude Vacuum 2;

   b. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit;

   c. the daily $H_2S$ concentration in the off-gas by indicator tube readings or other comparable analytical techniques. $H_2S$ concentration shall be determined at a point which is representative of the day's $H_2S$ level, to the extent possible;

   d. the daily total $SO_2$ emissions;

   e. the hourly $SO_2$ emission rate;

   f. the period of time the Vacuum 2 off-gas is not being burned in the Crude/Vac 2 Furnace (B019); and

   g. an estimate of the organic compound emission rate and organic compound content, in ppm, of off-gas when it is not being burned in the Crude/Vac 2 Furnace (B019).

3. See the applicable sections in Part II for miscellaneous process vents in A.III, referencing 40 CFR Part 63, Subpart CC.

## V. Reporting Requirements

1. See the applicable sections in Part II for equipment leaks in A.IV, referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. The permittee shall submit deviation (excursion) reports that identify any of the following occurrences:

   a. each period that data was not obtained and recorded as required by section A.II.2;

   b. each day in which the hourly $SO_2$ emission rate exceeded 0.40 pound per ton of actual process weight input; and

   c. each period when the off-gas from Crude Vacuum 2 is not being burned in the Crude/Vac 2 Furnace (B019). These reports shall include the estimated organic compound emission rate and the organic compound content, in ppm, of off-gas during each period when the off-gas is not being burned in the Crude/Vac 2 Furnace (B019).

   If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter.

3. See the applicable sections in Part II for miscellaneous process vents in A.IV, referencing 40 CFR Part 63, Subpart CC.

## V. Testing Requirements

1. See the applicable sections in Part II for equipment leaks in A.V, referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. See the applicable sections in Part II for miscellaneous process vents in A.V, referencing 40 CFR Part 63, Subpart CC.

3. Compliance with the emission limitation(s) of these terms and conditions shall be determined in accordance with the following methods(s):

   Emission Limitation:

   0.40 pound of $SO_2$ per ton of actual process weight input

   Applicable Compliance Method:

   If required, the permittee shall demonstrate compliance using Methods 1 though 4 and 6 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

4. Emission testing requirements

   a. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

      i. The emission testing shall be conducted within 6 months after issuance of this permit.

      ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for $SO_2$.

      iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

      Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A shall be used to demonstrate compliance. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

      iv. The test(s) shall be conducted while the emissions unit is operating at or near its maximum operating rate, unless otherwise specified or approved by the Toledo Division of Environmental Services.

   b. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Toledo Division of Environmental Services's refusal to accept the results of the emission test(s).

   c. Personnel from the Toledo Division of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

   d. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Toledo Division of Environmental Services within 30 days following completion of the test(s).

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

### 2. Additional Terms and Conditions

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| P011 - This emissions unit is a distillation tower and vacuum distillation tower identified as Crude 1 and Crude Vacuum 1. Vapors extracted from Crude Vacuum 1 are vented to the Crude 1 Amine Contactor and combusted in the Crude 1 Furnace (B015). | OAC rule 3745-18-54(W)(2) | 0.40 pound of sulfur dioxide ($SO_2$) per ton of actual process weight input<br><br>See section A.I.2.g. |
| | OAC rule 3745-21-09(M)(1) | See section A.I.2.a. |
| | OAC rule 3745-21-09(T) | See section A.I.2.b. |
| | OAC rule 3745-31-05(D) (PTI 04-1046 as modified on 8/5/1997) | 4.47 tons/yr $SO_2$ based on a rolling, 12-month summation<br><br>See section A.I.2.f. |
| | 40 CFR Part 63, Subpart A | See sections A.I.2.c and A.I.2.d. |
| | 40 CFR Part 63 Subpart CC<br>40 CFR 63.648 | See sections A.I.2.d and A.I.2.e. |
| | miscellaneous process vents<br>40 CFR Part 63, Subpart CC | See section A.I.2.g. |

#### 2. Additional Terms and Conditions

2.a The permittee shall control the emissions from this vacuum producing system by piping the vapors to the firebox of the Crude 1 Furnace (B015).

2.b Refer to Part II of this permit for the state requirements for equipment leaks found in sections A.I.2, A.II, A.III, A.IV, and A.V, referencing OAC rule 3745-21-09(T).

2.c 40 CFR Part 63, Subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 63.

2.d Table 6 of 40 CFR Part 63, Subpart CC specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.e Refer to Part II of this permit for the applicable equipment leak provisions found in sections A.I.2, A.II, A.III, A.IV, and A.V, referencing 40 CFR Part 60, Subpart VV.

2.f The permittee shall vent the Crude Vacuum 1 Unit off-gas to the Crude 1 Amine Contactor to reduce the hydrogen sulfide ($H_2S$) content of the off-gas. The Crude 1 Amine Contactor vent stream shall be burned in the Crude 1 Furnace (B015). The $H_2S$ content of the Crude Vacuum 1off-gas shall be controlled to a level so that emissions resulting from combustion of the off-gas do not exceed 4.47 tons as $SO_2$ per year based upon a rolling, 12-month summation of the monthly emissions.

2.g Refer to Part II of this permit for the miscellaneous process vent provisions found in sections A.I.2, A.II, A.III, A.IV, and A.V, referencing 40 CFR Part 63, Subpart CC.

## II. Operational Restrictions

1. See the applicable sections in Part II for equipment leaks in A.II, referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. See the applicable sections in Part II for miscellaneous process vents in A.II, referencing 40 CFR Part 63, Subpart CC.

## III. Monitoring and/or Record Keeping Requirements

1. See the applicable sections in Part II for equipment leaks in A.III, referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. The permittee shall monitor and record the following at least once per day for Crude Vacuum 1:

   a. daily flow of the off-gas in cubic feet from Crude Vacuum 1;

   b. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit;

   c. the daily $H_2S$ concentration in the off-gas by indicator tube readings or other comparable analytical techniques. $H_2S$ concentration shall be determined at a point which is representative of the day's $H_2S$ level, to the extent possible;

   d. the daily total $SO_2$ emissions;

   e. the hourly $SO_2$ emission rate;

   f. the monthly total $SO_2$ emissions;

g. the total $SO_2$ emissions per rolling, 12-month period; and

h. an estimate of the organic compound emission rate and organic compound content, in ppm, of Crude Vacuum 1 off-gas when it is not being burned in the Crude/Vac 1 Furnace (B015).

3. See the applicable sections in Part II for miscellaneous process vents in A.III, referencing 40 CFR Part 63, Subpart CC.

## IV. Reporting Requirements

1. See the applicable sections in Part II for equipment leaks in A.IV, referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. See the applicable sections in Part II for miscellaneous process vents in A.IV, referencing 40 CFR Part 63, Subpart CC.

3. The permittee shall submit deviation (excursion) reports that identify any of the following occurrences:

   a. each period that data was not obtained and recorded as required by section A.II.2;

   b. each month when the $SO_2$ emissions exceeded 4.47 tons per year as a rolling, 12-month summation;

   c. each day in which the hourly $SO_2$ emission rate exceeded 0.40 pound of $SO_2$ per ton of actual process weight input; and

   d. each period when the off-gas from Crude Vacuum 1 is not being burned in the Crude/Vac 1 Furnace (B015). These reports shall include the estimated organic compound emission rate and the organic compound content, in ppm, of off-gas during each period when the off-gas is not being burned in the Crude/Vac 1 Furnace (B015).

   If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter.

4. The deviation reports shall be submitted to the Toledo Division of Environmental Services on a quarterly basis and are due January 30, April 30, July 30 and October 30 for the previous calendar quarter.

## V. Testing Requirements

1. See the applicable sections in Part II for equipment leaks in A.V, referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. See the applicable sections in Part II for miscellaneous process vents in A.V, referencing 40 CFR Part 63, Subpart CC.

3. Compliance with the emission limitation(s) of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emission Limitation:

      0.40 pound of $SO_2$ per ton of actual process weight input

      Applicable Compliance Method:

      If required, the permittee shall demonstrate compliance using Methods 1 through 4 and 6 of 40 CFR Part 60 to demonstrate compliance. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

   b. Emission Limitation:

      4.47 tons/yr $SO_2$ as a rolling, 12-month summation

      Applicable Compliance Method:

      Multiply the daily sample(s) average $H_2S$ content by the actual offgas flow in mmscf/day (or sample period) to determine pounds per day. The total daily gas flow may be used when only 1 sample per day is collected. Total the daily $H_2S$ amounts to determine the monthly total $H_2S$ emissions. Convert $H_2S$ to $SO_2$ at a rate of 34 pounds of $H_2S$ to 64 pounds of $SO_2$ to determine the monthly total SO2 emissions. Add the monthly total to the total for the previous 11 months to determine the rolling, 12-month total $SO_2$ emissions.

4. Emission testing requirements

   a. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

      i. The emission testing shall be conducted within 6 months after issuance of this permit.

      ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for sulfur dioxide.

      iii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

         Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A shall be used to demonstrate compliance. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

iv. The test(s) shall be conducted while the emissions unit is operating at or near its maximum operating rate, unless otherwise specified or approved by the Toledo Division of Environmental Services.

b. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Toledo Division of Environmental Services's refusal to accept the results of the emission test(s).

c. Personnel from the Toledo Division of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

d. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Toledo Division of Environmental Services within 30 days following completion of the test(s).

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

Emissions Unit ID: **P013**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| P013 - belt filter press used for biological sludge | OAC rule 3745-31-05(A)(3) (PTI 04-379 issued 3/11/87) | The requirements established pursuant to this rule were determined to be the rules that were applicable at the time of issuance. |
| | 40 CFR Part 63, Subpart A | See sections A.I.2.a and A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See sections A.I.2.b and A.I.2.c. |

**2. Additional Terms and Conditions**

2.a 40 CFR Part 63, Subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 63.

2.b Table 6 of 40 CFR Part 63, Subpart CC specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.c This emissions unit is a Group 2 Miscellaneous Process Vent and has no applicable emission limit or control requirement under this regulation.

#### II. Operational Restrictions

None

#### III. Monitoring and/or Recordkeeping Requirements

None

#### IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **P014**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| P014 - 2.2 meter oily sludge belt filter press with no control | OAC rule 3745-21-09(T) | See section A.I.2.a. |
| | OAC rule 3745-31-05(A)(3) (PTI 04-379 issued 3/11/87) | See section A.II.2. |
| | 40 CFR Part 63, Subpart A | See sections A.I.2.b and A.I.2.c. |
| | 40 CFR Part 63, Subpart CC 40 CFR 63.648 | See sections A.I.2.c through A.I.2.e. |

**2. Additional Terms and Conditions**

2.a Refer to Part II of this permit for the state requirements for equipment leaks found in sections A.I.2, A.II, A.III, A.IV, and A.V, referencing OAC rule 3745-21-09(T).

2.b 40 CFR Part 63, Subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 63.

2.c Table 6 of 40 CFR Part 63, Subpart CC specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.d Refer to Part II of this permit for the applicable equipment leak provisions found in sections A.I.2, A.II, A.III, A.IV, and A.V, referencing 40 CFR Part 60, Subpart VV.

2.e This emissions unit is a Group 2 Miscellaneous Process Vent and has no applicable stack emission limit under this regulation.

#### II. Operational Restrictions

1. See the applicable sections in Part II for equipment leaks in A.II, referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. The operating hours of this emissions unit shall not exceed 4380 hours per year.

## III. Monitoring and/or Record Keeping Requirements

1. See the applicable sections in Part II for equipment leaks in A.III, referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. The permittee shall maintain monthly records of the total operating hours of this emissions unit and maintain records of the total operating hours per year.

## IV. Reporting Requirements

1. See the applicable sections in Part II for equipment leaks in A.IV, referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. The permittee shall submit a semi-annual report summarizing the operating hours of this emissions unit during the calendar year. This report shall be submitted to the Toledo Division of Environmental Services by January 30 and July 30 of each year and shall summarize the previous 12-month period.

2. The permittee shall submit semi-annual deviation (excursion) reports that identify all periods in which the emissions unit was operated in excess of 4,380 hours per year.

   If no deviations occurred during the 6-month period, then the permittee shall submit a report, which states that no deviations occurred during that 6-month period. These reports shall be submitted by January 30 and July 30 of each year and shall cover the previous 6-month period.

## V. Testing Requirements

1. See the applicable sections in Part II for equipment leaks in A.V, referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| P017 - Coker 2/ delayed petroleum coker | OAC rule 3745-21-09(T) | See section A.I.2.a. |
| | OAC rule 3745-21-09(UU)(3) | See sections A.I.2.h and A.I.2.i. |
| | OAC rule 3745-31-05(A)(3) (PTI 04-1046 as modified on August 5, 1998) | 18.3 tons per year of volatile organic compound (VOC) emissions (from coke cutting and equipment leaks)<br><br>4.1 pounds of VOC per coking cycle<br><br>1.3 tons per year VOC from the flare<br><br>109.5 pounds of sulfur dioxide ($SO_2$) per coking cycle<br><br>34.3 tons per year $SO_2$ from the flare<br><br>See sections A.I.2.b, A.I.2.g, and A.I.2.h. |
| | 40 CFR Part 60, Subpart GGG | See section A.I.2.c. |
| | 40 CFR Part 63, Subpart A | See sections A.I.2.d and A.I.2.e. |
| | 40 CFR Part 63, Subpart CC<br>40 CFR 63.648 | See sections A.I.2.e and A.I.2.f. |
| | miscellaneous process vents<br>40 CFR Part 63, Subpart CC | See section A.I.2.j. |

**2. Additional Terms and Conditions**

2.a Refer to Part II of this permit for the state requirements for equipment leaks found in sections A.I.2, A.II, A.III, A.IV, and A.V, referencing OAC rule 3745-21-09(T).

2.b The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(T) and 40 CFR Part 60, Subpart GGG.

2.c Equipment leaks that are subject to the provisions of both 40 CFR Part 60, Subpart GGG and 40 CFR Part 63, Subpart CC are required to comply only with the provisions specified in 40 CFR Part 63, Subpart CC.

2.d. 40 CFR Part 63, Subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 63.

2.e. Table 6 of 40 CFR Part 63, Subpart CC specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.f. Refer to Part II of this permit for the applicable equipment leak provisions found in sections A.I.2, A.II, A.III, A.IV, and A.V, referencing 40 CFR Part 60, Subpart VV.

2.g The short-term and annual emission limitations were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop monitoring, record keeping and/or reporting requirements to ensure compliance with these limitations.

2.h Refer to Part II of this permit for the applicable monitoring, record keeping, reporting and testing requirements for refinery flares found in sections A.I, A.II, A.III, A.IV, and A.V.

2.i The Coker 2 blowdown drum shall be vented to a flare that complies with the requirements of OAC rule 3745-21-09(DD)(10)(d).

2.j Refer to Part II of this permit for the miscellaneous process vent provisions found in sections A.I.2, A.II, A.III, A.IV, and A.V, referencing 40 CFR Part 63, Subpart CC.

## II. Operational Restrictions

1. The maximum allowable operating rate for this emissions unit is 626 coking cycles per year.

2. See the applicable sections in Part II for equipment leaks in A.II, referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

3. See the applicable sections in Part II for miscellaneous process vents in A.II, referencing 40 CFR Part 63, Subpart CC.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain daily records of the number of coking cycles completed each day.

2. See the applicable sections in Part II for equipment leaks in A.III, referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

3. The permittee shall collect and record the following information each day: the operating times for the capture (collection) system, control device, and the associated emissions unit.

## IV. Reporting Requirements

1. The permittee shall submit semi-annual deviation (excursion) reports of:

   a. any exceedances of the 626 coking cycles per year operational restriction; and

   b. any periods in which the capture (collection) system and/or control device was not in operation while the emissions unit was in operation.

   If no deviations occurred during the six-month period, then the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

   These reports shall be submitted semi-annually, i.e., by January 30 and July 30 of each year, and shall cover the previous 6 calendar months.

2. See the applicable sections in Part II for equipment leaks in A.IV, referencing 40 CFR Part 60, Subpart VV. and OAC rule 3745-21-09(T).

## V. Testing Requirements

1. Compliance with the emission limitation(s) of these terms and conditions shall be determined in accordance with the following methods(s):

   1.a Emission Limitation:

   18.3 tons per year VOC emissions from coke cutting and equipment leaks

   Applicable Compliance Method:

The 18.3 tons/yr VOC emission limit is based on the potential to emit for this emissions unit. The potential to emit was determined by adding the tons/yr VOC emissions from coke cutting and equipment leaks.

The maximum tons per year VOC emission from coke cutting was determined by multiplying the maximum of 626 coking cycles per year by the BP derived emission factor for coke cutting of 18 pounds of VOC emissions per coking cycle to obtain 5.63 tons/yr VOC emissions from coke cutting.

The maximum tons per year VOC emissions from equipment leaks was determined by multiplying the total number of components by a leaking factor of 2% of the total components. This product is then multiplied by the corresponding leak screening value correlation, multiplied by 2.2 lbs/kg, multiplied by 8760 hours per year, and divided by 2000 pounds per ton to obtain the VOC emission rate in tons per year for each type of leaking component for a total of 12.57 tons per year VOC emissions from equipment leaks. The leak screening values are listed in tables 2-10 and 2-14 of *Protocol for Equipment Leak Emission Estimates* (EPA document 453/R-95-017 or subsequent updates).

1.b Emission Limitation:

4.1 pounds VOC emissions per coking cycle from the flare

Applicable Compliance Method:

This emission limit is based on the BP derived uncontrolled emission factor of 205.8 pounds per coking cycle multiplied by 0.02 to account for a flare control efficiency of 98% when emissions were previously vented to the flare. The permittee now complies with this emission limitation by design, since the blowdown emissions are now recovered at the flare gas recovery system and used as refinery fuel gas.

1.c Emission Limitation:

1.3 tons per year VOC emissions from the flare

Applicable Compliance Method

This emission limitation is based on the 4.1 lb/coking cycle VOC emission limit multiplied by the maximum of 626 coking cycles per year and divided by 2000 pounds per ton when the emissions were vented to the flare. The permittee now complies with this emission limitation by design, since the blowdown emissions are now recovered at the flare gas recovery system and used as refinery fuel gas.

1.d Emission Limitation:

109.5 pounds $SO_2$ per coking cycle

Applicable Compliance Method:

This emission limitation is based on the BP derived emission factor when the blowdown emissions were vented to the flare. The permittee now complies with this emission limitation by design, since the blowdown emissions are now recovered at the flare gas recovery system and used as refinery fuel gas.

1.e Emission Limitation:

34.3 tons per year $SO_2$ emissions from the flare

Applicable Compliance Method:

This emission limitation is based on 109.5 lbs/coking cycle $SO_2$ multiplied by the maximum of 626 coking cycles per year and divided by 2000 pounds per ton when the blowdown emissions were vented to the flare. The permittee now complies with this emission limitation by design, since the blowdown emissions are now recovered at the flare gas recovery system and used as refinery fuel gas.

2. See the applicable sections in Part II for equipment leaks in A.V, referencing 40 CFR Part 60, Subpart VV. and OAC rule 3745-21-09(T).

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

Emissions Unit ID: **P019**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| P019 - Reformer 1/ Catalytic reformer with cyclic catalyst regeneration controlled by the West Flare | 40 CFR Part 63, Subpart UUU<br>40 CFR 63.1563(b) | See section A.I.2.a. |
| | 40 CFR 63.1563(e) | See section A.I.2.b. |
| | 40 CFR 63.1566(a) | See section A.I.2.c. |
| | 40 CFR 63.1567(a) | See section A.I.2.c. |
| | 40 CFR 63.1569(a) | See section A.I.2.c. |
| | 40 CFR 63.1577 | See section A.I.2.d. |
| | equipment leaks<br>40 CFR Part 63, Subpart A | See sections A.I.2.e. and 2.f. |
| | 40 CFR Part 63, Subpart CC<br>40 CFR 63.648 | See sections A.I.2.f. and 2.g. |
| | OAC rule 3745-21-09(T) | See section A.I.2.h. |

**2. Additional Terms and Conditions**

2.a. The permittee shall comply with the emission limitations and work practice standards for existing sources in 40 CFR Part 63, Subpart UUU by no later than April 11, 2005.

2.b. The permittee shall meet the notification requirements in 40 CFR 63.1574 [See section IV] according to the schedule in 40 CFR 63.1574 and in 40 CFR Part 63, Subpart A. Some of the notifications must be submitted before the date the permittee is required to comply with the emission limitations and work practice standards in this subpart.

2.c. The permittee shall comply with the applicable emission limitations specified in 40 CFR 63.1566(a)(1) [see Table 15 of section A.VI.]; 63.1567(a)(1) [see Table 16 of section A.VI.] and 63.1569(a)(1) [see Table 36 of section A.VI.] by no later than April 11, 2005.

i. [63.1566(a)(1)(i)]
The permittee can elect to vent emissions of total organic compounds (TOC) to a flare that meets the control device requirements in 40 CFR 63.11(b) (Option 1); or

ii. [63.1566(a)(1)(i)]
The permittee can elect to use a control device to meet a TOC percent reduction standard or concentration limit, whichever is less stringent (Option 2).

iii. [63.1567(a)(1); (a)(1)(i) and (a)(a)(ii)]
The permittee must meet each emission limitation in Table 22 [See section A.VI.] that applies to this emissions unit. These emission limitations apply during coke burn-off and catalyst rejuvenation. The permittee can choose from the following two options: elect to use a control device to meet either a percent reduction standard for hydrogen chloride (HCl) emissions (Option 1); or elect to meet an HCl concentration limit (Option 2).

iv. [63.1569(a)(1)(i) through (a)(1)(iv)]
The permittee can choose from four options for meeting with the work practice standards for bypass lines:
(a) Elect to install an automated system (Option 1);
(b) Elect to use a manual lock system (Option 2);
(c) Elect to seal the line (Option 3); or
(d) Elect to vent to a control device (Option 4).

v. [63.1569(a)(2)]
As provided in 40 CFR 63.6(g), the EPA, may choose to grant the permittee permission to use an alternative to the work practice standard in 40 CFR 63.1569(a)(1) [See section A.I.2.].

2.d. Table 44 [See section A.VI.] of 40 CFR Part 63, Subpart UUU shows which parts of the General Provisions in 40 CFR 63.1 through 63.15 apply.

2.e. 40 CFR Part 63, Subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 63.

2.f. Table 6 of 40 CFR Part 63, Subpart CC specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.g. Refer to Part II of this permit for the applicable equipment leak provisions found in sections A.I.2., A.II., A.III., A.IV. and A.V., referencing 40 CFR Part 60, Subpart VV.

2.h. Refer to Part II of this permit for the state requirements for equipment leaks found in sections A.I.2., A.II., A.III., A.IV. and A.V., referencing OAC rule 3745-21-09(T).

## II. Operational Restrictions

1. See the applicable sections in Part II for equipment leaks in A.II., referencing 40 CFR Part 60, Subpart VV. and OAC rule 3745-21-09(T).

2. 40 CFR Part 63, Subpart UUU
The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward.

   a. [63.1566] REQUIREMENTS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS

      i. [63.1566(a)(2)]
      The permittee shall comply with each site-specific operating limit in Table 16 [See section A.VI.] that applies to this emissions unit.

      ii. [63.1566(a)(3)]
      The emission limitations in Tables 15 and 16 [See section A.VI.] apply to emissions from catalytic reforming unit process vents that occur during depressuring and purging operations. These process vents include those used during unit depressurization, purging, coke burn, catalyst rejuvenation, and reduction or activation purge.

      iii. [63.1566(a)(4)]
      The emission limitations in Tables 15 and 16 [See section A.VI.] do not apply to emissions from process vents during depressuring and purging operations when the reactor vent pressure is 5 pounds per square inch gauge (psig) or less.

   b. [63.1567] REQUIREMENTS FOR INORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS - 40 CFR Part 63, Subpart UUU

      i. [63.1567(a)(2)]
      The permittee must meet each site-specific operating limit in Table 23 [See section A.VI.] that applies to this emissions unit. These operating limits apply during coke burn-off and catalyst rejuvenation.

## III. Monitoring and/or Record Keeping Requirements

1. See the applicable sections in Part II for equipment leaks in A.III., referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. 40 CFR Part 63, Subpart UUU
The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward.

a. [63.1566] REQUIREMENTS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS

i. [63.1566(a)(5)]
The permittee shall prepare an operation, maintenance, and monitoring plan according to the requirements in 40 CFR 63.1574(f) [See section A.III.] and operate at all times according to the procedures in the plan.

ii. [63.1566(b)(1)]
The permittee shall install, operate, and maintain a continuous monitoring system(s) according to the requirements in 40 CFR 63.1572 [See section A.III.] and Table 17 [See section A.VI.].

b. [63.1567] REQUIREMENTS FOR INORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS - 40 CFR Part 63, Subpart UUU

i. [63.1567(a)(3)]
The permittee must prepare an operation, maintenance, and monitoring plan according to the requirements in 40 CFR 63.1574(f) [See section A.III.] and operate at all times according to the procedures in the plan.

ii. [63.1567(b)(1)]
The permittee must install, operate, and maintain a continuous monitoring system(s) according to the requirements in 40 CFR 63.1572 [See section A.III.] and Table 24 [See section A.VI.].

c. [63.1569] REQUIREMENTS FOR HAP EMISSIONS FROM BYPASS LINES - 40 CFR Part 63, Subpart UUU
The work practice standards the permittee must meet are those of 63.1569(a)(1) and (a)(2) [See section A.I.2.] and the following:

i. [63.1569(a)(3)]
The permittee must prepare an operation, maintenance, and monitoring plan according to the requirements in 40 CFR 63.1574(f) [See section A.III.] and operate at all times according to the procedures in the plan.

d. [63.1570] GENERAL COMPLIANCE REQUIREMENTS - 40 CFR Part 63, Subpart UUU

i. [63.1570(a)]
The permittee must be in compliance with all of the non-opacity standards in this subpart during the times specified in 40 CFR 63.6(f)(1).

ii. [63.1570(b)]
The permittee must be in compliance with the opacity and visible emission limits in this subpart during the times specified in 40 CFR 63.6(h)(1).

iii. [63.1570(c)]
The permittee must always operate and maintain the affected emissions unit, including air pollution control and monitoring equipment, according to the provisions in 40 CFR 63.6(e)(1)(i). During the period April 11, 2005 and the date upon which continuous monitoring systems have been installed and validated and any applicable operating limits have been set, the permittee must maintain a log detailing the operation and maintenance of the process and emissions control equipment.

iv. [63.1570(d)]
The permittee must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in 40 CFR 63.6(e)(3).

v. [63.1570(e)]
During periods of startup, shutdown, and malfunction, the permittee must operate in accordance with the SSMP.

vi. [63.1570(f)]
The permittee must report each instance in which each emission limitation that was not met and each applicable operating limit in 40 CFR Part 63, Subpart UUU that was not met. This includes periods of startup, shutdown, and malfunction. The permittee also must report each instance in which the applicable work practice standards in 40 CFR Part 63, Subpart UUU were not met. These instances are deviations from the emission limitations and work practice standards in this subpart. These deviations must be reported according to the requirements in 40 CFR 63.1575 [See section A.IV.].

vii. [63.1570(g)]
Consistent with 40 CFR 63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if the permittee demonstrates to the Administrator's satisfaction that the permittee was operating in accordance with the SSMP. The SSMP must require that good air pollution control practices are used during those periods. The plan must also include elements designed to minimize the frequency of such periods (i.e., root cause analysis). The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in 40 CFR 63.6(e) and the contents of the SSMP.

e. [63.1572(c)] MONITORING, INSTALLATION, OPERATION, AND MAINTENANCE REQUIREMENTS [Table 41] - 40 CFR Part 63, Subpart UUU
The permittee must install, operate, and maintain each continuous parameter monitoring system according to the following paragraphs of this section.

i. [63.1572(c)(1)]
Each continuous parameter monitoring system must be installed, operated, and maintained according to the requirements in Table 41 [See section A.VI.] and in a manner consistent with the manufacturer's specifications or other written

procedures that provide adequate assurance that the equipment will monitor accurately.

ii. [63.1572(c)(2)]
The continuous parameter monitoring system must complete a minimum of one cycle of operation for each successive 15-minute period. The permittee must have a minimum of four successive cycles of operation to have a valid hour of data (or at least two if a calibration check is performed during that hour or if the continuous parameter monitoring system is out-of-control).

iii. [63.1572(c)(3)]
Each continuous parameter monitoring system must have valid hourly average data from at least 75 percent of the hours during which the process operated.

iv. [63.1572(c)(4)]
Each continuous parameter monitoring system must determine and record the hourly average of all recorded readings and if applicable, the daily average of all recorded readings for each operating day. The daily average must cover a 24-hour period if operation is continuous or the number of hours of operation per day if operation is not continuous.

v. [63.1572(c)(5)]
Each continuous parameter monitoring system must record the results of each inspection, calibration, and validation check.

f. [63.1572(d)]
The permittee must monitor and collect data according to the requirements in 63.1572(d)(1) and (d)(2) [See section A.III].

i. [63.1572(d)(1)]
Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), the permittee must conduct all monitoring in continuous operation (or collect data at all required intervals) at all times the affected emissions unit is operating.

ii. [63.1572(d)(2)]
The permittee may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities for purposes of this regulation, including data averages and calculations, for fulfilling a minimum data availability requirement, if applicable. The permittee must use all the data collected during all other periods in assessing the operation of the control device and associated control system.

g. [63.1573] MONITORING ALTERNATIVES - 40 CFR Part 63, Subpart UUU

i. [63.1573(b)]

If the permittee uses a wet scrubber to control inorganic HAP emissions from the vent on a catalytic reforming unit, the permittee can measure and record the pH of the water (or scrubbing liquid) exiting the scrubber at least once an hour during coke burn-off and catalyst rejuvenation using pH strips as an alternative to a continuous parameter monitoring system. The pH strips must meet the requirements in Table 41 [See section A.VI.].

ii. [63.1576(c)]
The permittee may request approval from the permitting authority to use an automated data compression system. An automated data compression system does not record monitored operating parameter values at a set frequency (e.g., once every hour) but records all values that meet set criteria for variation from previously recorded values. The permittee's request must contain a description of the monitoring system and data recording system, including the criteria used to determine which monitored values are recorded and retained, the method for calculating daily averages, and a demonstration that the system meets all of the criteria in 63.1576(c)(1) through (5) [See section A.III]:

(a) [63.1573(c)(1)]
The system measures the operating parameter value at least once every hour;

(b) [63.1573(c)(2)]
The system records at least 24 values each day during periods of operation;

(c) [63.1573(c)(3)]
The system records the date and time when monitors are turned off or on;

(d) [63.1573(c)(4)]
The system recognizes unchanging data that may indicate the monitor is not functioning properly, alerts the operator, and records the incident; and

(e) [63.1573(c)(5)]
The system computes daily average values of the monitored operating parameter based on recorded data.

iii. [63.1573(d)] REQUESTING MONITORING ALTERNATIVES
The permittee may request approval to monitor parameters other than those required in this subpart. The permittee must request approval if:

(a) [63.1573(d)(1)]
The permittee uses a control device other than a thermal incinerator, boiler, process heater, flare, electrostatic precipitator, or wet scrubber;

(b) [63.1573(d)(2)]
The permittee uses a combustion control device (e.g., incinerator, flare, boiler or process heater with a design heat capacity of at least 44 MW, boiler or process heater where the vent stream is introduced into the flame

zone), electrostatic precipitator, or scrubber but want to monitor a parameter other than those specified; or

(c) [63.1573(d)(3)]
The permittee wishes to use another type of continuous emission monitoring system that provides direct measurement of a pollutant (i.e., a PM or multi-metals HAP continuous emission monitoring system, a carbonyl sulfide/carbon disulfide continuous emission monitoring system, a TOC continuous emission monitoring system, or HCl continuous emission monitoring system).

iv. [63.1573(e)]
The permittee must submit a request for review and approval or disapproval to the Administrator. The request must include the information in 63.1573 (e)(1) through (5) [See section A.III].

(a) [63.1573(e)(1)]
A description of each affected emissions unit and the parameter(s) to be monitored to determine whether the affected source will continuously comply with the emission limitations and an explanation of the criteria used to select the parameter(s).

(b) [63.1573(e)(2)]
A description of the methods and procedures that will be used to demonstrate that the parameter can be used to determine whether the affected source will continuously comply with the emission limitations and the schedule for this demonstration. The permittee must certify that an operating limit will be established for the monitored parameter(s) that represents the conditions in existence when the control device is being properly operated and maintained to meet the emission limitation.

(c) [63.1573(e)(3)]
The frequency and content of monitoring, recording, and reporting, if monitoring and recording are not continuous. The permittee also must include the rationale for the proposed monitoring, recording, and reporting requirements.

(d) [63.1573(e)(4)]
Supporting calculations.

(e) [63.1573(e)(5)]
Averaging time for the alternative operating parameter.

h. [63.1574(f)] OPERATION, MAINTENANCE AND MONITORING PLAN - 40 CFR Part 63, Subpart UUU
As required by 40 CFR Part 63, Subpart UUU, the permittee must prepare and implement an operation, maintenance, and monitoring plan for each affected source, control system,

and continuous monitoring system. The purpose of this plan is to detail the operation, maintenance, and monitoring procedures that the permittee will follow.

i. [63.1574(f)(1)]
The permittee must submit the plan to the Toledo Division of Environmental Services for review and approval along with the notification of compliance status. While the permittee does not have to include the entire plan in the part 70 or 71 permit, the permittee must include the duty to prepare and implement the plan as an applicable requirement in the part 70 or 71 operating permit. The permittee must submit any changes to the Toledo Division of Environmental Services for review and approval and comply with the plan until the change is approved.

ii. [63.1574(f)(2) and (f)(2)(i) through (x))]
Each plan must include, at a minimum, the information specified in paragraphs (f)(2)(i) through (x) of 40 CFR 63.1574[See section A.III].

(a) [63.1574(f)(2)(i)]
Process and control device parameters to be monitored for each affected source, along with established operating limits.

(b) [63.1574(f)(2)(ii)]
Procedures for monitoring emissions and process and control device operating parameters for each affected source.

(c) [63.1574(f)(2)(vi)]
Procedures the permittee will use to determine the HCl concentration of gases from a semi-regenerative catalytic reforming unit with an internal scrubbing system (i.e., no add-on control device) when you use a colormetric tube sampling system, including procedures for correcting for pressure (if applicable to the sampling equipment).

(d) [63.1574(f)(2)(v)]
Procedures you will use to determine the pH of the water (or scrubbing liquid) exiting a wet scrubber if the permittee uses pH strips.

(e) [63.1574(f)(2)(viii)]
Monitoring schedule, including when the permittee will monitor and will not monitor an affected emissions unit (e.g., during the coke burn-off, regeneration process).

(f) [63.1574(f)(2)(x)]
Maintenance schedule for each affected emissions unit, monitoring system, and control device that is generally consistent with the manufacturer's instructions for routine and long-term maintenance.

i. [63.1576] RECORD KEEPING REQUIREMENTS - 40 CFR Part 63, Subpart UUU

i. [63.1576(a)]
The permittee must keep the records specified in 63.1576(a)(1) through (3) [See section A.III].

(a) [63.1576(a)(1)]
A copy of each notification and report that the permittee submitted to comply with this subpart, including all documentation supporting any initial notification or Notification of Compliance Status that the permittee submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv).

(b) [63.1576(a)(2)]
The records in 40 CFR 63.6(e)(1)(iii) through (v) related to startup, shutdown, and malfunction.

(c) [63.1576(a)(3)]
Records of performance tests, performance evaluations, and visible emission observations as required in 40 CFR 63.10(b)(2)(viii).

ii. [63.1576(c)]
The permittee must keep the records in 40 CFR 63.6(h) for visible emission observations.

iii. [63.1576(d)]
The permittee must keep records required by Tables 20, 21, 27 and 28 [See section A.VI.] (for catalytic reforming units) and Table 39 [See section A.VI.] (for bypass lines) to show continuous compliance with each emission limitation that applies to this emissions unit.

iv. [63.1576(e)]
The permittee must keep a current copy of the operation, maintenance, and monitoring plan onsite and available for inspection. The permittee also must keep records to show continuous compliance with the procedures in the operation, maintenance, and monitoring plan.

v. [63.1576(f)]
The permittee also must keep the records of any changes that affect emission control system performance including, but not limited to, the location at which the vent stream is introduced into the flame zone for a boiler or process heater.

vi. [63.1576(g)]
The records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1).

vii. [63.1576(h)]
As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

viii. [63.1576(i)]
The permittee must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee can keep the records offsite for the remaining 3 years.

## IV. Reporting Requirements

1. See the applicable sections in Part II for equipment leaks in A.IV., referencing 40 CFR Part 60, Subpart VV. and OAC rule 3745-21-09(T).

2. 40 CFR Part 63, Subpart UUU
The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward.

a. [63.1574] NOTIFICATION SUBMITTAL - 40 CFR Part 63, Subpart UUU

i. [63.1574(a)]
Except as allowed in 40 CFR 63.1574(a)(2) and (a)(3) [See section A.IV], the permittee must submit all of the notifications in 40 CFR 63.6(h), 63.7(b) and (c), 63.8(e), 63.8(f)(4), 63.8(f)(6), and 63.9(b) through (h) that apply to this emissions unit by the dates specified.

(a) [63.1574(a)(2)]
The permittee must submit the notification of intent to conduct a performance test required in 40 CFR 63.7(b) at least 30 calendar days before the performance test is scheduled to begin (instead of 60 days).

(b) [63.1574(a)(3)]
If the permittee is required to conduct a performance test, performance evaluation, design evaluation, visible emission observation, or other initial compliance demonstration, the permittee must submit a notification of compliance status according to 40 CFR 63.9(h)(2)(ii). The permittee can submit this information in an operating permit application, in an amendment to an operating permit application, in a separate submission, or in any combination. If the required information has been submitted previously, the permittee does not have to provide a separate notification of compliance status. Just refer to the earlier submissions instead of duplicating and resubmitting the previously submitted information.

(i) [63.1574(a)(3)(i)]
For each initial compliance demonstration that does not include a performance test, the permittee must submit the Notification of Compliance Status no later than 30 calendar days following completion of the initial compliance demonstration.

(ii) [63.1574(a)(3)(ii)]
For each initial compliance demonstration that includes a performance test, the permittee must submit the notification of

compliance status, including the performance test results, no later than 150 calendar days after April 11, 2005.

ii. [63.1574(c)]
As specified in 40 CFR 63.9(b)(3), if the permittee starts the new or reconstructed affected source on or after April 11, 2002, the permittee must submit the initial notification no later than 120 days after April 11, 2005.

iii. [63.1574(d)]
The permittee also must include the information in Table 42 [See section A.VI.] in your notification of compliance status.

b. [63.1575] REPORTS FOR 40 CFR Part 63, Subpart UUU

i. [63.1575(a)]
The permittee must submit each report in Table 43 [See section A.VI.] that applies to this emissions unit.

ii. [63.1575(b)]
Unless the Administrator has approved a different schedule, the permittee must submit each report by the date in Table 43 [See section A.VI.] and according to the requirements in 40 CFR 63.1575(b)(1) through (b)(5) [See section A.IV].

(a) [63.1575(b)(1)]
The first compliance report must cover the period beginning April 11, 2005 and ending on June 30, 2005.

(b) [63.1575(b)(2)]
The first compliance report must be postmarked or delivered no later than July 31, 2005.

(c) [63.1575(b)(3)]
Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(d) [63.1575(b)(4)]
Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(e) [63.1575(b)(5)]
For each affected emissions unit that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A), the permittee may submit the first and subsequent compliance reports according to the dates the permitting

authority has established instead of according to the dates in 63.1575(b)(1) through (b)(4) [See section A.IV].

iii. [63.1575(c)]
The compliance report must contain the following information:

(a) [63.1575(c)(1)]
Company name and address.

(b) [63.1575(c)(2)]
Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

(c) [63.1575(c)(3)]
Date of report and beginning and ending dates of the reporting period.

(d) [63.1575(c)(4)]
If there are no deviations from any emission limitation that applies to this emissions unit and there are no deviations from the requirements for work practice standards, a statement that there were no deviations from the emission limitations or work practice standards during the reporting period.

iv. [63.1575(d)]
For each deviation from an emission limitation and for each deviation from the requirements for work practice standards that occurs at an affected emissions unit where a continuous opacity monitoring system or a continuous emission monitoring system is not used to comply with the emission limitation or work practice standard in 40 CFR Part 63, Subpart UUU, the compliance report must contain the information in 63.1575(c)(1) through (c)(3) [See section A.IV] and the information in 63.1575(d)(1) through (d)(3) [See section A.IV].

(a) [63.1575(d)(1)]
The total operating time of each affected emissions unit during the reporting period.

(b) [63.1575(d)(2)]
Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(c) [63.1575(d)(3)]
Information on the number, duration, and cause for monitor downtime incidents (including unknown cause, if applicable, other than downtime associated with zero and span and other daily calibration checks).

v. [63.1575(f)]
The permittee also must include the information required in 63.1575(f)(1) through (f)(2) [See section A.IV] in each compliance report, if applicable.

(a) [63.1575(f)(1)]
A copy of any performance test done during the reporting period on any affected unit. The report may be included in the next semiannual report. The copy must include a complete report for each test method used for a particular kind of emission point tested. For additional tests performed for a similar emission point using the same method, the permittee must submit the results and any other information required, but a complete test report is not required. A complete test report contains a brief process description; a simplified flow diagram showing affected processes, control equipment, and sampling point locations; sampling site data; description of sampling and analysis procedures and any modifications to standard procedures; quality assurance procedures; record of operating conditions during the test; record of preparation of standards; record of calibrations; raw data sheets for field sampling; raw data sheets for field and laboratory analyses; documentation of calculations; and any other information required by the test method.

(b) [63.1575(f)(2)]
Any requested change in the applicability of an emission standard (e.g., changing from the PM standard to the Ni standard for catalytic cracking units or from the HCl concentration standard to percent reduction for catalytic reforming units) in the periodic report. The permittee must include all information and data necessary to demonstrate compliance with the new emission standard selected and any other associated requirements.

vi. [63.1575(g)]
The permittee may submit reports required by other regulations in place of or as part of the compliance report if they contain the required information.

vii. [63.1575(h)]
The reporting requirements in paragraphs 63.1575(h)(1) and (2) [See section A.IV] apply to startups, shutdowns, and malfunctions:

(a) [63.1575(h)(1)]
When actions taken to respond are consistent with the plan, the permittee is not required to report these events in the semiannual compliance report and the reporting requirements in 40 CFR 63.6(e)(3)(iii) and 63.10(d)(5) do not apply.

(b) [63.1575(h)(2)]
When actions taken to respond are not consistent with the plan, the permittee must report these events and the response taken in the

semiannual compliance report. In this case, the reporting requirements in 40 CFR 63.6(e)(3)(iv) and 63.10(d)(5) do not apply.

3. General Reporting Requirements

a. All requests, reports, applications, submittals, and other communications pursuant to this permit shall be submitted to: Toledo Division of Environmental Services, Air Resources Section, 348 South Erie Street, Toledo, Ohio 43602-1633.

b. All requests, reports, applications, submittals, and other communications to the Administrator pursuant to this permit shall be submitted to: Director Ohio EPA c/o Bob Hodanbosi, Ohio EPA, Lazarus Government Center, P.O. Box 1049, Columbus, OH 43216-1049.

c. If any State requires a submittal that contains all the information required in an application, notification, request, report, statement, or other communication required in this part, the permittee may send the appropriate Regional Office of the EPA a copy of that submittal to satisfy the requirements of this part for that communication.

If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

## V. Testing Requirements

1. See the applicable sections in Part II for equipment leaks in A.V., referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. 40 CFR Part 63, Subpart UUU
The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward.

a. [63.1566] DEMONSTRATING INITIAL COMPLIANCE REQUIREMENTS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS - 40 CFR Part 63, Subpart UUU

i. [63.1566(b)(2)]
The permittee shall conduct each performance test for a catalytic reforming unit according to the requirements in 40 CFR 63.1571 [See section A.V.] and under the conditions specified in Table 18 [See section A.VI.] of this subpart.

ii. [63.1566(b)(3)]
The permittee shall establish each site-specific operating limit in Table 16 [See section A.VI.] that applies to this source according to the procedures in Table 18 [See section A.VI.].

iii. [63.1566(b)(4) and (b)(5)]

Use the procedures in 63.1566(b)(4)(i) or (b)(5) [See section A.V] to determine initial compliance with the emission limitations.

(a) [63.1566(b)(4)(i)]
If the permittee elects the percent reduction standard under Option 2, calculate the emission rate of TOC using Equation 1 of this section (if you use Method 25) or Equation 2 of this section (if you use Method 25A); then calculate the mass emission reduction using Equation 3 of this section as stated in 40 CFR 63.1566(b)(4)(i).

(b) [63.1566(b)(b)(5)]
If the permittee elects the 20 parts per million by volume (ppmv) concentration limit, correct the measured TOC concentration for oxygen ($O_2$) content in the gas stream using Equation 4 of this section as stated in 40 CFR 63.1566(b)(5).

iv. [63.1566(b)(6)]
The permittee is not required to do a TOC test if:

(a) [63.1566(b)(6)(i)]
The permittee elects to vent emissions to a flare as provided in 40 CFR 63.1566(a)(1)(i) [See section A.I.2.] (Option 1); or

(b) [63.1566(b)(6)(ii)]
The permittee elects the TOC percent reduction or concentration limit 40 CFR 63.1566(a)(1)(ii) (Option 2), and uses a boiler or process heater with a design heat input capacity of 44 MW or greater or a boiler or process heater in which all vent streams are introduced into the flame zone.

v. [63.1566(b)(7)]
The permittee must demonstrate initial compliance with each applicable emission limitation according to Table 19 [See section A.IV.].

vi. [63.1566(b)(8)]
The permittee must demonstrate initial compliance with the work practice standard in 40 CFR 63.1566(a)(5) [See section A.III.] by submitting the operation, maintenance, and monitoring plan to the Toledo Division of Environmental Services as part of the Notification of Compliance Status.

vii. [63.1566(b)(9)]
The permittee shall submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 40 CFR 63.1574 [See section A.IV.].

viii. [63.1566(c)(1)]
The permittee shall demonstrate continuous compliance with each emission limitation in Tables 15 and 16 [See section A.VI.] that applies to this source according to the methods specified in Tables 20 and 21 [See section A.VI.].

ix. [63.1566(c)(2)]
The permittee shall demonstrate continuous compliance with the work practice standards in 40 CFR 63.1566(a)(3) [See section A.II.] by complying with the procedures in your operation, maintenance, and monitoring plan.

b. [63.1567] DEMONSTRATING CONTINUOUS COMPLIANCE WITH THE INORGANIC HAP EMISSION LIMITATIONS AND WORK PRACTICE STANDARDS - 40 CFR Part 63, Subpart UUU

i. [63.1567(b)(2)]
The permittee must conduct each performance test for a catalytic reforming unit according to the requirements in 40 CFR 63.1571[See section A.V.] and the conditions specified in Table 25 [See section A.VI.].

ii. [63.1567(b)(3)]
The permittee must establish each site-specific operating limit in Table 23 [See section A.VI.] that applies to this emissions unit according to the procedures in Table 25 [See section A.VI.].

iii. [63.1567(b)(4)]
The permittee must demonstrate initial compliance with each applicable emission limitation that applies according to Table 26 [See section A.VI.].

iv. [63.1567(b)(5)]
The permittee must demonstrate initial compliance with the work practice standard in 40 CFR 63.1567(a)(3) [See section A.III.] by submitting the operation, maintenance, and monitoring plan to the Toledo Division of Environmental Services as part of your Notification of Compliance Status.

v. [63.1567(b)(6)]
The permittee must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 40 CFR 63.1574 [See section A.IV.].

vi. [63.1567(c)(1)]
The permittee must demonstrate continuous compliance with each emission limitation in Tables 22 and 23 [See section A.VI.] that applies to this source according to the methods specified in Tables 27 and 28 [See section A.VI.].

vii. [63.1567(c)(2)]
The permittee must demonstrate continuous compliance with the work practice standard in 40 CFR 63.1567(a)(3) [See section A.II.] by maintaining records to document conformance with the procedures in the operation, maintenance and monitoring plan.

c. [63.1569(c)] DEMONSTRATING CONTINUOUS COMPLIANCE FOR HAP EMISSIONS FROM BYPASS LINES - 40 CFR Part 63, Subpart UUU

The permittee shall demonstrate initial compliance with the work practice standards for bypass lines as stated in the following:

i. [63.1569(b)(1)]
If the permittee elects the option in 40 CFR 63.1569(a)(1)(i) [See section A.I.2.], the permittee must conduct each performance test for a bypass line according to the requirements in 63.1571 [See section A.V.] and under the conditions specified in Table 37 [See section A.VI.].

ii. [63.1569(b)(2)]
The permittee must demonstrate initial compliance with each work practice standard in Table 36 [See section A.VI.] that applies to this emissions unit according to Table 38 [See section A.VI.].

iii. [63.1569(b)(3)]
The permittee must demonstrate initial compliance with the work practice standard in 63.1569(a)(3) [See section A.III] by submitting the operation, maintenance, and monitoring plan to the Toledo Division of Environmental Services as part of the notification of compliance status.

iv. [63.1569(b)(4)]
The permittee must submit the notification of compliance status containing the results of the initial compliance demonstration according to the requirements in 40 CFR 63.1574 [See section A.IV.].

v. [63.1569(c)(1)]
The permittee must demonstrate continuous compliance with each work practice standard in Table 36 [See section A.VI.] that applies according to the requirements in Table 39 [See section A.VI.].

vi. [63.1569(c)(2)]
The permittee must demonstrate continuous compliance with the work practice standard in 40 CFR 63.1569(a)(2) [See section A.III.] by complying with the procedures in the operation, maintenance, and monitoring plan.

d. [63.1571] PERFORMANCE TEST AND OTHER INITIAL COMPLIANCE DEMONSTRATION - 40 CFR Part 63, Subpart UUU

i. [63.1571(a)]
The permittee must conduct performance tests and report the results by no later than 150 days after April 11, 2005 and according to the provisions in 40 CFR 63.6(a)(2) of Subpart A. If the permittee is required to do a performance evaluation or test for a semi-regenerative catalytic reforming unit catalyst regenerator vent, the permittee may do them at the first regeneration cycle after April 11, 2005 and report the results in a followup Notification of Compliance Status report due no later than 150 days after the test.

(a) [63.1571(a)(1)]
For each emission limitation or work practice standard where initial compliance is not demonstrated using a performance test, opacity observation, or visible emission observation, the permittee must conduct the initial compliance demonstration within 30 calendar days after April 11, 2005.

(b) [63.1571(a)(2)]
For each emission limitation where the averaging period is 30 days, the 30-day period for demonstrating initial compliance begins at 12:00 a.m. on April 11, 2005 and ends at 11:59 p.m., May 11, 2005.

ii. [63.1571(b)] GENERAL REQUIREMENTS FOR PERFORMANCE TESTS AND PERFORMANCE EVALUATIONS
The permittee must:

(a) [63.1571(b)(1)]
Conduct each performance test according to the requirements in 40 CFR 63.7(e)(1).

(b) [63.1571(b)(2)]
Except for opacity and visible emission observations, conduct three separate test runs for each performance test as specified in 40 CFR 63.7(e)(3). Each test run must last at least 1 hour.

(c) [63.1571(b)(3)]
Conduct each performance evaluation according to the requirements in 40 CFR 63.8(e).

(d) [63.1571(b)(4)]
Not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in 40 CFR 63.7(e)(1).

(e) [63.1571(b)(5)]
Calculate the average emission rate for the performance test by calculating the emission rate for each individual test run in the units of the applicable emission limitation using Equation 2, 5, or 8 of 40 CFR 63.1564, and determining the arithmetic average of the calculated emission rates.

iii. [63.1571(c)] ENGINEERING ASSESSMENT
The permittee may choose to use an engineering assessment to calculate the process vent flow rate, net heating value, TOC emission rate, and total organic HAP emission rate expected to yield the highest daily emission rate when determining the emission reduction or outlet concentration for the organic HAP standard for catalytic reforming units. If an engineering assessment is used, the permittee must document all data, assumptions, and procedures to the satisfaction of the Toledo Division of Environmental Services. An engineering assessment

may include the approaches listed in 40 CFR 63.1571(c)(1) through (c)(4) See section A.V]. Other engineering assessments may be used but are subject to review and approval by the Toledo Division of Environmental Services.

(a) [63.1571(c)(1)]
The permittee may use previous test results provided the tests are representative of current operating practices at the emissions unit, and provided EPA methods or approved alternatives were used;

(b) [63.1571(c)(2)]
The permittee may use bench-scale or pilot-scale test data representative of the process under representative operating conditions;

(c) [63.1571(c)(3)]
The permittee may use maximum flow rate, TOC emission rate, organic HAP emission rate, or organic HAP or TOC concentration specified or implied within a permit limit applicable to the process vent; or

(d) [63.1571(c)(4)]
The permittee may use design analysis based on engineering principles, measurable process parameters, or physical or chemical laws or properties. Examples of analytical methods include, but are not limited to:

(i) [63.1571(c)(4)(i)]
Use of material balances based on process stoichiometry to estimate maximum TOC concentrations;

(ii) [63.1571(c)(4)(ii)]
Calculation of hourly average maximum flow rate based on physical equipment design such as pump or blower capacities; and

(iii) [63.1571(c)(4)(iii)]
Calculation of TOC concentrations based on saturation conditions.

iv. [63.1571(d)] ADJUSTING THE PROCESS OR CONTROL DEVICE MEASURED VALUES WHEN ESTABLISHING AN OPERATING LIMIT
If the permittee does a performance test to demonstrate compliance, the permittee must base the process or control device operating limits for continuous parameter monitoring systems on the results measured during the performance test.

i. [63.1571(d)(4)]
If the permittee uses continuous parameter monitoring systems, the permittee may adjust one of the monitored operating parameters (flow rate, voltage and secondary current, pressure drop, liquid-to-gas ratio) from the average of measured values during the performance test to the maximum value (or minimum value, if applicable) representative of worst-case operating conditions, if necessary. This adjustment of measured values may be done using control device design specifications, manufacturer recommendations, or other applicable information. The permittee must provide supporting documentation and rationale in your Notification of

Compliance Status, demonstrating to the satisfaction of the Toledo Division of Environmental Services, that the affected source complies with the applicable emission limit at the operating limit based on adjusted values.

v. [63.1571(e)]
The permittee may change the established operating limit by meeting the requirements in 63.1571(e)(1) through (3) [See section A.V].

(a) [63.1571(e)(1)]
The permittee may change the established operating limit for a continuous parameter monitoring system by doing an additional performance test, a performance test in conjunction with an engineering assessment, or an engineering assessment to verify that, at the new operating limit, you are in compliance with the applicable emission limitation.

(b) [63.1571(e)(2)]
The permittee must establish a revised operating limit for the continuous parameter monitoring system if changes are made in the process or operating conditions that could affect control system performance or designated conditions are changed after the last performance or compliance tests were done. The permittee can establish the revised operating limit as described in 63.1571(e)(1) [See section A.V].

(c) [63.1571(e)(3)]
The permittee may change the site-specific opacity operating limit only by doing a new performance test.

## VI. Miscellaneous Requirements

1. 40 CFR Part 63, Subpart UUU
The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward.

a. The following tables from 40 CFR Part 63, Subpart UUU are attached:
Tables 15; 16; 17; 18 ; 19; 20; 21; 22; 23; 24; 25; 26; 27; 28; 36; 37; 38; 39; 41; 42; 43 and 44.

**TABLE 15 TO Subpart UUU OF PART 63.**—ORGANIC HAP EMISSION LIMITS FOR CATALYTIC REFORMING UNITS

[As stated in § 63.1566(a)(1), you must meet each emission limitation in the following table that applies to you]

| For each new or existing catalytic reforming unit * * * | You must meet this emission limit for each process vent during depressuring and purging operation * * * |
|---|---|
| 1. Option 1 ..... | Vent emissions to a flare that meets the requirements for control devices in § 63.11(b). Visible emissions from a flare must not exceed a total of 5 minutes during any 2-hour operating period. |
| 2. Option 2 ..... | Using a control device, reduce uncontrolled emissions of total organic compounds (TOC) from your process vent by 98 percent by weight or to a concentration of 20 ppmv (dry basis), corrected to 3 percent oxygen, whichever is less stringent. If you vent emissions to a boiler or process heater to comply with the percent reduction or concentration emission limitation, the vent stream must be introduced into the flame zone, or any other location that will achieve the percent reduction or concentration standard. |

**TABLE 16 TO Subpart UUU OF PART 63.**—OPERATING LIMITS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS

[As stated in § 63.1566(a)(2), you must meet each operating limit in the following table that applies to you]

| For each new or existing catalytic reforming unit * * * | For this type of control device * * * | You must meet this operating limit during depressuring and purging operations * * * |
|---|---|---|
| 1. Option 1: vent to flare ..... | Flare that meets the requirements for control devices in § 63.11(b). | The flare pilot light must be present at all times and the flare must be operating at all times that emissions may be vented to it. |
| 2. Option 2: percent reduction or concentration limit. | Thermal incinerator, boiler or process heater with a design heat input capacity under 44 MW, or boiler or process heater in which all vent streams are not introduced into the flame zone. | The daily average combustion zone temperature must not fall below the limit established during the performance test. |

**TABLE 17 TO Subpart UUU OF PART 63.**—CONTINUOUS MONITORING SYSTEMS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS

[As stated in § 63.1566(b)(1), you must meet each requirement in the following table that applies to you]

| For each new or exiting catalytic reforming unit * * * | If you use this type of control device * * * | You must install and operate this type of continuous monitoring system * * * |
|---|---|---|
| 1. Option 1: vent to a flare ..... | Flare that meets the requirements for control devices in § 63.11(b). | Monitoring device such as a thermocouple, an ultraviolet beam sensor, or infrared sensor to continuously detect the presence of a pilot flame. |
| 2. Option 2: percent reduction or concentration limit. | Thermal incinerator, process heater or boiler with a design heat input capacity under 44 MW, or process heater or boiler in which all vent streams are not introduced into the flame zone. | Continuous parameter monitoring systems to measure and record the combustion zone temperature. |

**TABLE 18 TO Subpart UUU OF PART 63.**—REQUIREMENTS FOR PERFORMANCE TESTS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS

[As stated in § 63.1566(b)(2) and (3), you must meet each requirement in the following table that applies to you

| For each new or exiting catalytic reforming unit * * * | You must * * * | Using * * * | According to these requirements * * * |
|---|---|---|---|
| 1. Option 1: vent to a flare. ..... | a. Conduct visible emission observations. | Method 22 (40 CFR Part 60, Appendix A). | 2-hour observation period. Record the presence of a flame at the pilot light over the full period of the test. |
| | b. Determine that the flare meets the requirements for net heating value of the gas being combusted and exit velocity. | Not applicable ..... | 40 CFR 60.11(b)(6) through (8). |
| 2. Option 2: percent reduction or concentration limit. | a. Select sampling site ..... | Method 1 or 1A (40 CFR part 60, Appendix A). No traverse site selection method is needed for vents smaller than 0.10 meter in diameter. | Sampling sites must be located at the inlet (if you elect the emission reduction standard) and outlet of the control device and prior to any releases to the atmosphere. |
| | b. Measure gas volumetric flow rate. | Method 2, 2A, 2C, 2D, 2F, or 2G (40 CFR Part 60, Appendix A), as applicable. | |
| | c. Measure TOC concentration (for percent reduction standard). | Method 25 (40 CFR Part 60, Appendix A) to measure TOC concentration at the inlet and outlet of the control device. If the TOC outlet concentration is expected to be less than 50 ppm, you can use Method 25A to measure TOC concentration at the inlet and the outlet of the control device. | Take either an integrated sample or four grab samples during each run. If you use a grab sampling technique, take the samples at approximately equal intervals in time, such as 15-minute intervals during the run. |
| | d. Calculate TOC emission rate and mass emission reduction. | Calculate emission rate by Equation 1 of § 63.1566 (if you use Method 25) or Equation 2 of § 63.1566 (if you use Method 25A). Calculate mass emission reduction by Equation 3 of § 63.1566. | |
| | e. Measure TOC concentration (for concentration standard). | Method 25A (40 CFR Part 60, appendix A) to measure TOC concentration at the outlet of the control device. | |
| | f. Determine oxygen content in the gas stream at the outlet of the control device. | Method 3A or 3B (40 CFR part 60, Appendix A), as applicable. | |
| | g. Correct the measured TOC concentration for oxygen content. | Equation 4 of § 63.1566 | |
| | h. Established each operating limit in Table 16 of this subpart that applies to you for a thermal incinerator, or process heater or boiler with a design heat input capacity under 44 | Data from the continuous parameter monitoring systems. | Collect the temperature monitoring data every 15 minutes during the entire period of the initial TOC performance test. Determine and record the minimum hourly average combustion |

| | | | |
|---|---|---|---|
| | MW, or process heater or boiler in which all vent streams are not introduced into the flame zone. | | zone temperature. |

**TABLE 19 TO Subpart UUU OF PART 63**—INITIAL COMPLIANCE WITH ORGANIC HAP EMISSION LIMITS FOR CATALYTIC REFORMING UNITS

[As stated in § 63.1566(b)(7), you must meet each requirement in the following table that applies to you.]

| For . . . | For the following emission limit ... | You have demonstrated initial compliance if . . . |
|---|---|---|
| 1. Each new and existing catalytic reforming unit. | a. Visible emissions from a flare must not exceed a total of 5 minutes during any 2 consecutive hours.<br><br>b. Reduce uncontrolled emissions of TOC from your process vent using a control device, by 98 percent by weight or to a concentration of 20 ppmv, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent. | Visible emissions, measured using Method 22 over the 2-hour observation period of the performance test do not exceed a total of 5 minutes.<br><br>The mass emission reduction measured using Method 25 over the period of the performance test, is at least 98 percent by weight. The mass emission reduction is calculated using Equations 1 (or 2) and 3 of § 63.1566 or the TOC concentration, measured by Method 25A over the period of the performance test, does not exceed 20 ppmv (dry basis), corrected to 3 percent oxygen using Equation 4 of § 63.1566. |

**TABLE 20 TO Subpart UUU OF PART 63.**—CONTINUOUS COMPLIANCE WITH ORGANIC HAP EMISSION LIMITS FOR CATALYTIC REFORMING UNITS

[As stated in § 63.1566(c)(1), you must meet each requirement in the following table that applies to you]

| For * * * | For this emission limit * * * | You must demonstrate continuous compliance during depressuring and purging by * * * |
|---|---|---|
| 1. Option 1: Each new or existing catalytic reforming unit. | Vent emissions from your process vent to a flare that meets the requirements in § 63.11(b). | Maintaining visible emissions from a flare below a total of 5 minutes during any 2 consecutive hours. |
| 2. Option 2: Each new or existing catalytic reforming unit. | Using a control device, reduce uncontrolled emissions of TOC from your process vent by 98 percent by weight or to a concentration of 20 ppmv, (dry basis), corrected to 3 percent oxygen, whichever is less stringent. | Maintaining a 98 percent by weight TOC emission reduction; or maintaining a TOC concentration of not more than 20 ppmv (dry basis), corrected to 3 percent oxygen, whichever is less stringent. |

**TABLE 20 TO Subpart UUU OF PART 63.**—CONTINUOUS COMPLIANCE WITH ORGANIC HAP EMISSION LIMITS FOR CATALYTIC REFORMING UNITS

[As stated in § 63.1566(c)(1), you must meet each requirement in the following table that applies to you]

| For * * * | For this emission limit * * * | You must demonstrate continuous compliance during depressuring and purging by * * * |
|---|---|---|
| 1. Option 1: Each new or existing catalytic reforming unit. | Vent emissions from your process vent to a flare that meets the requirements in § 63.11(b). | Maintaining visible emissions from a flare below a total of 5 minutes during any consecutive hours. |
| 2. Option 2: Each new or existing catalytic reforming unit. | Using a control device, reduce uncontrolled emissions of TOC from your process vent by 98 percent by weight or to a concentration of 20 ppmv, (dry basis), corrected to 3 percent oxygen, whichever is less stringent. | Maintaining a 98 percent by weight TOC emission reduction; or maintaining a TOC concentration of not more than 20 ppmv (dry basis), corrected to 3 percent oxygen, whichever is less stringent. |

**TABLE 21 TO Subpart UUU OF PART 63.**—CONTINUOUS COMPLIANCE WITH OPERATING LIMITS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS

[As stated in § 63.1566(c)(1), you must meet each requirement in the following table that applies to you]

| For * * * | If you use * * * | For this operating limit * * * | You must demonstrate continuous compliance during depressuring and purging by * * * |
|---|---|---|---|
| 1. Each new or existing catalytic reforming unit. | a. Flare that meets the requirements in § 63.11(b). | The flare pilot light must present at all times and flare must be operating times that emissions may vented to it. | Collecting flare monitoring data according to § 63.1572; and recording for each 1-hour period whether the monitor was continuously operating and the pilot light was continuously present during each 1-hour period. |
| | b. Thermal incinerator, boiler or process heater with a design input capacity under 44 MW or boiler or process heater in which all vent streams are not introduced into the flame zone. | Maintain the daily average combustion zone temperature above the limit established during the performance test. | Collecting the hourly and daily temperature monitoring data according to § 63.1572; and maintaining the daily average combustion zone temperature above the limit established during the performance test. |

**TABLE 22 TO Subpart UUU OF PART 63**—INORGANIC HAP EMISSION LIMITS FOR CATALYTIC REFORMING UNITS

[As stated in § 63.1567(a)(1), you must meet each emission limitation in the following table that applies to you]

| For * * * | You must meet this emission limit for your process vent during coke burn-off and catalyst rejuvenation * * * |
|---|---|

| | |
|---|---|
| 1. Each existing semi-regenerative catalytic reforming unit. | Reduce uncontrolled emissions of hydrogen chloride (HC1) by 92 percent by weight using a control device or to a concentration of 30 ppmv (dry basis), corrected to 3 percent oxygen. |
| 2. Each existing cyclic or continuous catalytic reforming unit. | Reduce uncontrolled emissions of HC1 by 97 percent by weight using a control device or to a concentration of 10 ppmv (dry basis), corrected to 3 percent oxygen. |
| 3. Each new semi-regenerative, cyclic, or continuous catalytic reforming unit. | Reduce uncontrolled emissions of HC1 by 97 percent by weight using a control device or to a concentration of 10 ppmv (dry basis), corrected to 3 percent oxygen. |

**TABLE 23 TO Subpart UUU OF PART 63.**—OPERATING LIMITS FOR INORGANIC HAP EMISSION LIMITATIONS FOR CATALYTIC REFORMING UNITS

[As stated in § 63.1567(a)(2), you must meet each operating limit in the following table that applies to you]

| For * * * | If you use this type of control device * * * | You must meet this operating limit during coke burn-off and catalytst rejuvenation . . . |
|---|---|---|
| 1. Each new or existing catalytic reforming unit | a. Wet scrubber ..... | The daily average pH of the water (or scrubbing liquid) exiting the scrubber must not fall below the limit established during the performance test; and the daily average liquid-to-gas ratio must not fall below the limit established during the performance test. |
| | b. Internal scrubbing system (i.e., no add-on control device). | The HCl concentration in the catalyst regenerator exhaust gas must not exceed the limit established during the performance test. |

**TABLE 24 TO Subpart UUU OF PART 63.**—CONTINUOUS MONITORING SYSTEMS FOR INORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS

[As stated in § 63.1567(b)(1), you must meet each requirement in the following table that applies to you]

| If you use this type of control device for your vent * * * | You must install and operate this type of continuous monitoring system * * * |
|---|---|
| 1. Wet scrubber ..... | Continuous parameter monitoring system to measure and record the pH of the water (or scrubbing liquid) exiting the scrubber during coke burn-off and catalyst rejuvenation. If applicable, you can use the alternative in § 63.1573 instead of a continuous parameter monitoring system for pH of the water (or scrubbing liquid); and continuous parameter monitoring systems to measure and record the gas flow rate to the scrubber and the total water (or scrubbing liquid) flow rate to the scrubber during coke burn-off and catalyst rejuvenation. |
| 2. Internal scrubbing system (i.e., no addon control device). | Colormetric tube sampling system to measure the HCl concentration in the catalyst regenerator exhaust gas during coke burn-off and catalyst rejuvenation. |

**TABLE 25 TO Subpart UUU OF PART 63.**—REQUIREMENTS FOR PERFORMANCE TESTS FOR INORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS

[As stated in § 63.1567(b)(2) and (3), you must meet each requirement in the following table that applies to you]

| If you use this type of control device or system * * * | You must * * * | Using * * * | According to these requirements * * * |
|---|---|---|---|
| 1. Wet scrubber ..... | a. Measure the HCl concentration at the outlet of the control device (for the concentration standard) or at the inlet and outlet of the control d4evice (for the percent reduction standard). | i. Method 26A (40 CFR part 60, Appendix A). | (1) Sampling rate must be at least 0.014 dscm/min (0.5 dscf/min). You must do the test during the coke burn-off and catalyst rejuvenation cycle, but don't make any test runs during the first hour or the last 6 hours of the cycle.<br><br>(2) Record the total amount (rate) of scrubbing liquid or solution and the amount (rate) of makeup liquid to the scrubber during each test run. |
| | b. Establish operating limit for pH level. | ..... | (1) Measure and record the pH of the water (or scrubbing liquid) exiting the scrubber every 15 minutes during the entire period of the performance test. Determineand record the hourly average pH level from the recorded values.<br><br>(2) If you use the alternative method in § 63.1573, measure and record the pH of the water (or scrubbing liquid) exiting the scrubber during coke burn-off and catalyst rejuvenation using pH strips at least three times during each run. Determine and record the average pH level. |
| | c. Establish operating limit for liquid- to-gas ratio. | Data from the continuous parameter monitoring systems. | Measure and record the gas flow rate to the scrubber and the total water (or scrubbing liquid) flow rate to the scrubber every 15 minutes during the entire period of the performance test. Determine and record the hourly average gas flow rate and total water (or scrubbing liquid) flow rate. Determine and record the minimum liquid-to-gas ratio. |
| 2. Internal scrubbing system (i.e., no add-on control device). | a. Measure the concentration of HCl in the catalyst regenerator exhaust gas. | Method 26 (40 CFR Part 60, Appendix A). | Sampling rate must be at least 0.014 dscm/min (0.5 dscf/min). You must do the test during the coke burn-off and catalyst rejuvenation cycle, but don't make any test runs during the first hour or the last 6 hours of the cycle. |
| | b. Establish operating limit for HCl concentration. | Measure and record the HCl concentration in the catalyst regenerator exhaust gas using the colorimetric tube sampling system at least three times during each test run. Determine and | |

| | | | |
|---|---|---|---|
| | | record the average HCl concentration. | |

**TABLE 26 TO Subpart UUU OF PART 63.**—INITIAL COMPLIANCE WITH INORGANIC HAP EMISSION LIMITS FOR CATALYTIC REFORMING UNITS

[As stated in § 63.1567(b)(4), you must meet each requirement in the following table that applies to you]

| For* * * | For the following emission limit * * * | You have demonstrated initial compliance if * * * |
|---|---|---|
| 1. Each existing semi-regenerative catalytic reforming unit. | Reduce uncontrolled emissions of HCl by 92 percent by weight using a control device or to a concentration of 30 ppmv, (dry basis), corrected to 3 percent oxygen. | Average emissions of HCl measured using Method 26 or 26A, as applicable over the period of the performance test, are reduced by 92 percent or to a concentration less than or equal to 30 ppmv (dry basis) corrected to 3 percent oxygen. |
| 2. Each existing cyclic or continuous catalytic reforming unit and each new semi-regenerative, cyclic, or continuous catalytic reforming unit. | Reduce uncontrolled emissions of HCl by 97 percent by weight using a control device, or to a concentration of 10 ppmv (dry basis), corrected to 3 percent oxygen. | Average emissions of HCl measured using Method 26 or 26A, as applicable over the period of the performance test, are reduced by 97 percent or to a concentration less than or equal to 10 ppmv (dry basis) corrected to 3 percent oxygen. |

**TABLE 27 TO Subpart UUU OF PART 63.**—CONTINUOUS COMPLIANCE WITH INORGANIC HAP EMISSION LIMITS FOR CATALYTIC REFORMING UNITS

[As stated in § 63.1567(c)(1), you must meet each requirement in the following table that applies to you]

| For * * * | For this emission limit * * * | You must demonstrate continuous compliance during coke burn-off and catalyst rejuvenation by * * * |
|---|---|---|
| 1. Each existing semi-regenerative catalytic reforming unit. | Reduce uncontrolled emissions of HCl by 92 percent by weight using a control device or to a concentration of 30 ppmv (dry basis), corrected to 3 percent oxygen. | Maintaining a 92 percent HCl emission reduction or an HCl concentration no more than 30 ppmv (dry basis), corrected to 3 percent oxygen. |
| 2. Each existing cyclic or continuous catalytic reforming unit. | Reduce uncontrolled emissions of HCl by 97 percent by weight using a control device, or to a concentration of 10 ppmv (dry basis), corrected to 3 percent oxygen. | Maintaining a 97 percent HCl control efficiency or an HCl concentration no more than 10 ppmv (dry basis), corrected to 3 percent oxygen. |
| 3. Each new semi-regenerative, cyclic, or continuous catalytic reforming unit. | Reduce uncontrolled emissions of HCl by 97 percent by weight using a control device, or to a concentration of 10 ppmv (dry basis), corrected to 3 percent oxygen. | Maintaining a 97 percent HCl control efficiency or an HCl concentration no more than 10 ppmv (dry basis), corrected to 3 percent oxygen. |

**TABLE 28 TO Subpart UUU OF PART 63.**—CONTINUOUS COMPLIANCE WITH OPERATING LIMITS FOR INORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS

[As stated in § 63.1567(c)(1), you must meet each requirement in the following table that applies to you]

| For * * * | For this operating limit * * * | If you use this type of control device * * * | You must demonstrate continuous compliance during coke burn-off and catalyst rejuvenation by * * * |
|---|---|---|---|
| 1. Each new or existing catalytic reforming unit. | a. The daily average pH of the water (or scrubbing and liquid) exiting the scrubber must not fall below the level established during the performance test. | i. Wet scrubber ..... | (1) Collecting the hourly and daily average pH monitoring data according to § 63.1572; and maintaining the daily average the pH above the operating limit established during the performance test.<br><br>(2) If you use the alternative in § 63.1573, measuring and recording the pH of the water (or scrubbing liquid) exiting the scrubber every hour according to § 63.1572; determining and recording the daily average pH; and maintaining the daily average pH above the operating limit established during the performance test. |
| | b. The daily average liquid-to-gas ratio must not fall below the level established during the performance test. | Wet scrubber ..... | Collecting the hourly average gas flow rate and total water (or scrubbing liquid) flow rate monitoring data; determining and recording the hourly average liquid-to-gas ratio; determining and recording the daily average liquid-to-gas ratio; and maintaining the daily average liquidto-gas ratio above the limit established during the performance test. |
| | c. The HCl concentration in the catalyst regenerator exhaust gas must not exceed the applicable operating limit established during the performance test. | Internal scrubbing system (e.g., no add-on control device). | Measuring and recording the concentration of HCl every 4 hours using a colormetric tube sampling system; and maintaining the HCl concentration below the applicable operating limit. |

### TABLE 36 TO Subpart UUU OF PART 63.—WORK PRACTICE STANDARDS FOR HAP EMISSIONS FROM BYPASS LINES

[As stated in § 63.1569(a)(1), you must meet each work practice standard in the following table that applies to you]

| Option | You must meet one of these equipment standards * * * |
|---|---|
| 1. Option 1 ..... | Install and operate a device (including a flow indicator, level recorder, or electronic valve position monitor) to continuously detect, at least every hour, whether flow is present in the bypass line. Install the device at or as near as practical to the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere. |
| 2. Option 2 ..... | Install a car-seal or lock-and-key device placed on the mechanism by which the bypass device flow position is controlled (e.g., valve handle, damper level) when the bypass device is in the closed position such that the bypass line valve cannot be opened without breaking the seal or removing the device. |
| 3. Option 3 ..... | |
| 4. Option 4 ..... | Seal the bypass line by installing a solid blind between piping flanges. |
| | Vent the bypass line to a control device that meets the appropriate requirements in this subpart. |

### TABLE 37 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS FOR BYPASS LINES

[As stated in § 63.1569(b)(1), you must meet each requirement in the following table that applies to you]

| For this standard . . . | You must . . . |
|---|---|
| 1. Option 1: Install and operate a flow indicator, level recorder, or electronic valve position monitor. | Record during the performance test for each type of control device whether the flow indicator, level recorder, or electronic valve position monitor was operating and whether flow was detected at any time during each hour of level the three runs comprising the performance test. |

### TABLE 38 TO Subpart UUU OF PART 63.—INITIAL COMPLIANCE WITH WORK PRACTICE STANDARDS FOR HAP EMISSIONS FROM BYPASS LINES

[As stated in § 63.1569(b)(2), you must meet each requirement in the following table that applies to you]

| For * * * | For this work practice standard * * * | You have demonstrated initial compliance if * * * |
|---|---|---|
| 1. Each new or existing bypass line associated with a catalytic cracking unit, catalylic reforming unit, or sulfur recovery unit. | a. Option 1: Install and operate a device (including a flow indicator, level recorder, or electronic valve position monitor) to continuously detect, at least every hour, whether flow is present in the bypass line. Install the device at or as near as practical to the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere. | The installed equipment operates properly during each run of the performance test and no flow is present in the line during the test. |
| | b. Option 2: Install a car-seal or lock-and-key device placed on the mechanism by which the bypass device flow position is controlled (e.g., valve handle, damper level) when the bypass device is in the closed position such that the bypass line valve cannot be opened without breaking the seal or removing the device. | As part of the notification of compliance status, you certify that you installed the equipment, the equipment was operational by your compliance date, and you identify what equipment was installed. |
| | c. Option 3: Seal the bypass line by installing a solid blind between piping flanges. | See item 1.b. of this table. |
| | d. Option 4: Vent the bypass line to a control device that meets the appropriate requirements | See item 1.b. of this table. |

| | | |
|---|---|---|
| | in this subpart. | |

**TABLE 39 TO Subpart UUU OF PART 63.**—CONTINUOUS COMPLIANCE WITH WORK PRACTICE STANDARDS FOR HAP EMISSIONS FROM BYPASS LINES

[As stated in § 63.1569(c)(1), you must meet each requirement in the following table that applies to you]

| If you elect this standard * * * | You must demonstrate continuous compliance by * * * |
|---|---|
| 1. Option 1: Flow indicator, level recorder, or electronic valve position monitor. | Continuously monitoring and recording whether flow is present in the bypass line; visually inspecting the device at least once every hour if the device is not equipped with a recording system that provides a continuous record; and recording whether the device is operating properly and whether flow is present in the bypass line. |
| 2. Option 2: Car-seal or lock-and-key device ..... | Visually inspecting the seal or closure mechanism at least once every month; and recording whether the bypass line valve is maintained in the closed position and whether flow is present in the line. |
| 3. Option 3: Solid blind flange ..... | Visually inspecting the blind at least once a month; and recording whether the blind is maintained in the correct position such that the vent stream cannot be diverted through the bypass line. |
| 4. Option 4: Vent to control device ..... | Monitoring the control device according to appropriate subpart requirements. |
| 5. Option 1, 2, 3, or 4 ..... | Recording and reporting the time and duration of any bypass. |

**TABLE 41 TO Subpart UUU OF PART 63**.—REQUIREMENTS FOR INSTALLATION, OPERATION, AND MAINTENANCE OF CONTINUOUS PARAMETER MONITORING SYSTEMS—Continued

[As stated in § 63.1572(c)(1), you must meet each requirement in the following table that applies to you]

| If you use a continuous parameter monitoring system to measure and record * * * | You must * * * |
|---|---|
| 1. Voltage and secondary current or total power input. | At least monthly, inspect all components of the continuous parameter monitoring system for integrity and all electrical connections for continuity; and record the results of each inspection. |
| 2. Pressure drop [1] ..... | Locate the pressure sensor(s) in a position that provides a representative measurement of the pressure; minimize or eliminate pulsating pressure, vibration, and internal and external corrosion; use a gauge with an accuracy ± 2 percent over the operating range; check pressure tap for plugs at least once a week; using a manometer, check gauge calibration quarterly and transducer calibration monthly; for a semi-regenerative catalytic reforming unit, you can check the calibration quarterly and monthly or prior to regeneration, whichever is longer; record the results of each calibration; conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range, or install a new pressure sensor; at least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage; and record the results of each inspection. |
| 3. Air flow rate, gas flow rate, or total water (or scrubbing liquid) flow rate. | Locate the flow sensor(s) and other necessary equipment such as straightening vanes in a position that provides representative flow; use a flow rate sensor with an accuracy within ±5 percent; reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances; conduct a flow sensor calibration check at least semiannually; for a semi-regenerative catalytic reforming unit, you can check the calibration at least semiannually or prior to regeneration, whichever is longer; record the results of each calibration; if you elect to comply with Option 3 (Ni lb/hr) or Option 4 (Ni lb/1,000 lbs of coke burn-off) for the HAP metal emission limitations in § 63.1564, install the continuous parameter monitoring system for gas flow rate as close as practical to the continuous opacity monitoring system; and if you don't use a continuous opacity monitoring system, install the continuous parameter monitoring system for gas flow rate as close as practical to the control device. |
| 4. Combustion zone temperature ..... | Install the temperature sensor in the combustion zone or in the ductwork immediately downstream of the combustion zone before any substantial heat exchange occurs; locate the temperature sensor in a position that provides a representative temperature; use a temperature sensor with an accuracy of ±1 percent of the temperature being measured, expressed in degrees Celsius (C) or ±0.5 degrees C, whichever is greater; shield the temperature sensor system from electromagnetic interference and chemical contaminants; if you use a chart recorder, it must have a sensitivity in the minor division of at least 20 degrees Fahrenheit; perform an electronic calibration at least semiannually according to the procedures in the manufacturer's owners manual; following the electronic calibration, conduct a temperature sensor validation check, in which a second or redundant temperature sensor placed nearby the process temperature sensor must yield a reading within 16.7 degrees C of the process temperature sensor's reading; record the results of each calibration and validation check; conduct calibration and validation checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range, or install a new temperature sensor; and at least monthly, inspect all components for integrity and all electrical connections for continuity, oxidation, and galvanic corrosion. |
| 5. pH ..... | Locate the pH sensor in a position that provides a representative measurement of pH; ensure the sample is properly mixed and representative of the fluid to be measured; check the pH meter's calibration on at least two points every 8 hours of process operation; at least monthly, inspect all components for integrity and all electrical components for continuity; record the results of each inspection; and if you use pH strips to measure the pH of the water exiting a wet scrubber as an alternative to a continuous parameter monitoring system, you must use pH strips with an accuracy of ±10 percent. |
| 6. HCl concentration ..... | Use a colormetric tube sampling system with a printed numerical scale in ppmv, a standard measurement range of 1 to 10 ppmv (or 1 to 30 ppmv if applicable), and a standard deviation for measured values of no more than ±15 percent. System must include a gas detection pump and hot air probe if needed for the measurement range. |

**TABLE 42 TO Subpart UUU OF PART 63.—ADDITIONAL** INFORMATION FOR INITIAL NOTIFICATION OF COMPLIANCE STATUS

[As stated in § 63.1574(d), you must meet each requirement in the following table that applies to you]

| For * * * | You must provide this additional information * * * |
|---|---|
| 1. Identification of affected sources and emission points. | Nature, size, design, method of operation, operating design capacity of each affected source; identify each emission point for each HAP; identify any affected source or vent associated with an affected source not subject to the requirements of Subpart UUU. |
| 2. Initial compliance ..... | Identification of each emission limitation you will meet for each affected source, including any option you select (i.e., NSPS, PM or Ni, flare, percent reduction, concentration, options for bypass lines); if applicable, certification that you have already conducted a performance test to demonstrate initial compliance with the NSPS for an affected source; certification that the vents meet the applicable emission limit and the continuous opacity or that the emission monitoring system meets the applicable performance specification; if applicable, certification that you have installed and verified the operational status of equipment by your compliance date for each bypass line that meets the requirements of Option 2, 3, or 4 in § 63.1569 and what equipment you installed; identification of the operating limit for each affected source, including supporting documentation; if your affected source is subject to the NSPS, certification of compliance with NSPS emission limitations and performance specifications; a brief description of performance test conditions (capacity, feed quality, catalyst, etc.); an engineering assessment (if applicable); and if applicable, the flare design (e.g., steam-assisted, air-assisted, or non-assisted), all visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the Method 22 test. |
| 3. Continuous compliance ..... | Each monitoring option you elect; and identification of any unit or vent for which monitoring is not required; and the definition of ''operating day.'' (This definition, subject to approval by the applicable permitting authority, must specify the times at which a 24-hr operating day begins and ends.) |

**TABLE 43 TO Subpart UUU OF PART 63.**—REQUIREMENTS FOR REPORTS

[As stated in § 63.1575(a), you must meet each requirement in the following table that applies to you]

| You must submit a(n) * * * | The report must contain * * * | You must submit the report * * * |
|---|---|---|
| 1. Compliance report ..... | If there are not deviations from any emission limitation or work practice standard that applies to you, a statement that there were no deviations from the standards during the reporting period and that no continuous opacity monitoring system or continuous emission monitoring system was inoperative, inactive, out-of-control, repaired, or adjusted; and if you have a deviation from any emission limitation or work practice standard during the reporting period, the report must contain the information in § 63.1575(d) or (e) | Semiannually according to the requirements in § 63.1575(b). |

**Table 44 to Subpart UUU of Part 63 -** Applicability of NESHAP General Provisions to Subpart UUU
As stated in §63.1577, you must meet each requirement in the following table that applies to you.

| Citation | Subject | Applies to Subpart UUU | Explanation |
|---|---|---|---|
| §63.1 | Applicability | Yes | Except that Subpart UUU specifies calendar or operating day. |
| §63.2 | Definitions | Yes | |
| §63.3 | Units and Abbreviations | Yes | |
| §63.4 | Prohibited Activities | Yes | |
| §63.5(a)-(c) | Construction and Reconstruction | Yes | In §63.5(b)(4), replace the reference to §63.9 with §63.9(b)(4) and (5). |
| §63.5(d)(1)(i) | Application for Approval of Construction or Reconstruction - General Application Requirements | Yes | Except, Subpart UUU specifies the application is submitted as soon as practicable before startup but no later than 90 days (rather than 60) after the promulgation date where construction or reconstruction had commenced and initial startup had not occurred before promulgation. |
| §63.5(d)(1)(ii) | | Yes | Except that emission estimates specified in §63.5(d)(1) (ii)(H) are not required. |
| §63.5(d)(1)(iii) | | No | Subpart UUU specifies submission of notification of compliance status. |
| §63.5(d)(2) | | No | |
| §63.5(d)(3) | | Yes | Except that §63.5(d)(3)(ii) does not apply. |
| §63.5(d)(4) | | Yes | |
| §63.5(e) | Approval of Construction or Reconstruction | Yes | |
| §63.5(f)(1) | Approval of Construction or Reconstruction Based on State Review | Yes | |
| §63.5(f)(2) | | Yes | Except that 60 days is changed to 90 days and cross-reference to §63.9(b)(2) does not apply. |
| §63.6(a) | Compliance with Standards and Maintenance - Applicability | Yes | |
| §63.6(b)(1)-(4) | Compliance Dates for New and Reconstructed Sources | Yes | |
| §63.6(b)(5) | | Yes | Except that Subpart UUU specifies different compliance dates for sources. |
| §63.6(b)(6) | [Reserved] | Not appli-cable | |

| | | | |
|---|---|---|---|
| §63.6(b)(7) | Compliance Dates for New and Reconstructed Area Sources That Become Major | Yes | |
| §63.6(c)(1)-(2) | Compliance Dates for Existing Sources | Yes | Except that Subpart UUU specifies different compliance dates for sources subject to Tier II gasoline sulfur control requirements. |
| §63.6(c)(3)-(4) | [Reserved] | Not appli-cable | |
| §63.6(c)(5) | Compliance Dates for Existing Area Sources That Become Major | Yes | |
| §63.6(d) | [Reserved] | Not appli-cable | |
| §63.6(e)(1)-(2) | Operation and Maintenance Requirements | Yes | |
| §63.6(e)(3)(i)-(iii) | Startup, Shutdown, and Malfunction Plan | Yes | |
| §63.6(e)(3)(iv) | | Yes | Except that reports of actions not consistent with plan are not required within 2 and 7 days of action but rather must be included in next periodic report. |
| §63.6(e)(3)(v)-(viii) | | Yes | The owner or operator is only required to keep the latest version of the plan. |
| §63.6(f)(1)-(2)(iii)(C) | Compliance with Emission Standards | Yes | |
| §63.6(f)(2)(iii)(D) | | No | |
| §63.6(f)(2)(iv)-(v) | | Yes | |
| §63.6(f)(3) | | Yes | |
| §63.6(g) | Alternative Standard | Yes | |
| §63.6(h) | Opacity/VE Standards | Yes | |
| §63.6(h)(2)(i) | Determining Compliance with Opacity/VE Standards | No | Subpart UUU specifies methods. |
| §63.6(h)(2)(ii) | [Reserved] | Not appli-cable | |
| §63.6(h)(2)(iii) | | Yes | |
| §63.6(h)(3) | [Reserved] | Not appli-cable | |
| §63.6(h)(4) | Notification of Opacity/VE Observation Date | Yes | Applies to Method 22 tests. |
| §63.6(h)(5) | Conducting Opacity/VE Observations | No | |
| §63.6(h)(6) | Records of Conditions During Opacity/VE Observations | Yes | Applies to Method 22 observations. |
| §63.6(h)(7)(i) | Report COM Monitoring Data from Performance Test | Yes | |

| | | | |
|---|---|---|---|
| §63.6(h)(7)(ii) | Using COM Instead of Method 9 | No | |
| §63.6(h)(7)(iii) | Averaging Time for COM during Performance Test | Yes | |
| §63.6(h)(7)(iv) | COM Requirements | Yes | |
| §63.6(h)(8) | Determining Compliance with Opacity/VE Standards | Yes | |
| §63.6(h)(9) | Adjusted Opacity Standard | Yes | |
| §63.6(i)(1)-(14) | Extension of Compliance | Yes | Not applicable to an affected source with Tier II compliance date. May be applicable to an affected source exempt from Tier II rule. |
| §63.6(i)(15) | [Reserved] | Not appli-cable | |
| §63.6(i)(16) | | Yes | |
| §63.6(j) | Presidential Compliance Exemption | Yes | |
| §63.7(a)(1) | Performance Test Requirements-Applicability | Yes | Except that Subpart UUU specifies the applicable test and demonstration procedures. |
| §63.7(a)(2) | Performance Test Dates | No | Test results must be submitted in the Notification of Compliance Status report due 150 days after the compliance date. |
| §63.7(a)(3) | Section 114 Authority | Yes | |
| §63.7(b) | Notifications | Yes | Except that Subpart UUU specifies notification at least 30 days prior to the scheduled test date rather than 60 days. |
| §63.7(c) | Quality Assurance Program/Site-Specific Test Plan | Yes | |
| §63.7(d) | Performance Test Facilities | Yes | |
| §63.7(e) | Conduct of Tests | Yes | |
| §63.7(f) | Alternative Test Method | Yes | |
| §63.7(g) | Data Analysis, Record Keeping, Reporting | Yes | Except performance test reports must be submitted with notification of compliance status due 150 days after the compliance date. |
| §63.7(h) | Waiver of Tests | Yes | |
| §63.8(a)(1) | Monitoring Requirements - Applicability | Yes | |
| §63.8(a)(2) | Performance Specifications | Yes | |
| §63.8(a)(3) | [Reserved] | Not appli-cable | |
| §63.8(a)(4) | Monitoring with Flares | Yes | |
| §63.8(b)(1) | Conduct of Monitoring | Yes | |

| | | | |
|---|---|---|---|
| §63.8(b)(2)-(3) | Multiple Effluents and Multiple Monitoring Systems | Yes | Subpart UUU specifies the required monitoring locations. |
| §63.8(c)(1) | Monitoring System Operation and Maintenance | Yes | |
| §63.8(c)(1)(i)-(ii) | Startup, Shutdown, and Malfunctions | Yes | Except that Subpart UUU specifies that reports are not required if actions are consistent with the SSM plan, unless requested by the permitting authority. If actions are not consistent, actions must be described in next compliance report. |
| §63.8(c)(1)(iii) | Compliance with Operation and Maintenance Requirements | Yes | |
| §63.8(c)(2)-(3) | Monitoring System Installation | Yes | Except that Subpart UUU specifies that for continuous parameter monitoring systems, operational status verification includes completion of manufacturer written specifications or installation operation, and calibration of the system or other written procedures that provide adequate assurance that the equipment will monitor accurately. |
| §63.8(c)(4) | Continuous Monitoring System Requirements | No | Subpart UUU specifies operational requirements. |
| §63.8(c)(4)(i)-(ii) | Continuous Monitoring System Requirements | Yes | Except that these requirements apply only to a continuous opacity monitoring system or a continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or $SO_2$ limits. |
| §63.8(c)(5) | COM Minimum Procedures | Yes | |
| §63.8(c)(6) | CMS Requirements | No | Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or $SO_2$ limits. |
| §63.8(c)(7)-(8) | CMS Requirements | Yes | |
| §63.8(d) | Quality Control Program | Yes | Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or $SO_2$ limits. |

| | | | |
|---|---|---|---|
| §63.8(e) | CMS Performance Evaluation | Yes | Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or $SO_2$ limits. Results are to be submitted as part of the Notification of Compliance Status due 150 days after the compliance date. |
| §63.8(f)(1)-(5) | Alternative Monitoring Method | Yes | Except that Subpart UUU specifies procedures for requesting alternative monitoring systems and alternative parameters. |
| §63.8(f)(6) | Alternative to Relative Accuracy Test | Yes | Applicable to continuous emission monitoring systems if performance specification requires a relative accuracy test audit. |
| §63.8(g)(1)-(4) | Reduction of Monitoring Data | Yes | Applies to a continuous opacity monitoring system or continuous emission monitoring system. |
| §63.8(g)(5) | Data Reduction | No | Subpart UUU specifies requirements. |
| §63.9(a) | Notification Requirements - Applicability | Yes | Duplicate Notification of Compliance Status report to the Regional Administrator may be required. |
| §63.9(b)(1)-(5) | Initial Notifications | Yes | Except that notification of construction or reconstruction is to be submitted as soon as practicable before startup but no later than 30 days (rather than 60 days) after the effective date if construction or reconstruction had commenced but startup had not occurred before the effective date. |
| §63.9(c) | Request for Extension of Compliance | Yes | |
| §63.9(d) | New Source Notification for Special Compliance Requirements | Yes | |
| §63.9(e) | Notification of Performance Test | Yes | Except that notification is required at least 30 days before test. |
| §63.9(f) | Notification of VE/Opacity Test | Yes | |
| §63.9(g) | Additional Notification Requirements for Sources with Continuous Monitoring Systems | Yes | Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or $SO_2$ limits. |
| §63.9(h) | Notification of Compliance Status | Yes | Except that Subpart UUU specifies the notification is due no later than 150 days after compliance date. |
| §63.9(i) | Adjustment of Deadlines | Yes | |

| | | | |
|---|---|---|---|
| §63.9(j) | Change in Previous Information | Yes | |
| §63.10(a) | Record Keeping and Reporting-Applicability | Yes | |
| §63.10(b) | Records | Yes | Except that §63.10(b)(2)(xiii) applies if you use a continuous emission monitoring system to meet the NSPS or you elect to meet the NSPS, CO, or $SO_2$ reduced sulfur limit and the performance evaluation requires a relative accuracy test audit. |
| §63.10(c)(1)-(6), (9)-(15) | Additional Records for Continuous Monitoring Systems | Yes | Except that these requirements apply if you use a continuous opacity monitoring system or a continuous emission monitoring system to meet the NSPS or elect to meet the NSPS opacity, CO, or $SO_2$ limits. |
| §63.10(c)(7)-(8) | Records of Excess Emissions and Exceedances | No | Subpart UUU specifies requirements. |
| §63.10(d)(1) | General Reporting Requirements | Yes | |
| §63.10(d)(2) | Performance Test Results | No | Subpart UUU requires performance test results to be reported as part of the Notification of Compliance Status due 150 days after the compliance date. |
| §63.10(d)(3) | Opacity or VE Observations | Yes | |
| §63.10(d)(4) | Progress Reports | Yes | |
| §63.10(d)(5)(i) | Startup, Shutdown, and Malfunction Reports | Yes | Except that reports are not required if actions are consistent with the SSM plan, unless requested by permitting authority. |
| §63.10(d)(5)(ii) | | Yes | Except that actions taken during a startup, shut- down, or malfunction that are not consistent with the plan do not need to be reported within 2 and 7 days of commencing and completing the action, respectively, but must be included in the next periodic report. |
| §63.10(e)(1)-(2) | Additional CMS Reports | Yes | Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or $SO_2$ limits. Reports of performance evaluations must be submitted in Notification of Compliance Status. |
| §63.10(e)(3) | Excess Emissions/CMS Performance Reports | No | Subpart UUU specifies the applicable requirements. |
| §63.10(e)(4) | COMS Data Reports | Yes | |

| | | | |
|---|---|---|---|
| §63.10(f) | Record Keeping/ Reporting Waiver | Yes | |
| §63.11 | Control Device Requirements | Yes | Applicable to flares. |
| §63.13 | Addresses | Yes | |
| §63.14 | Incorporation by Reference | Yes | |
| §63.15 | Availability of Information | Yes | |

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| P020 - Reformer 2/ Catalytic reformer with cyclic catalyst regeneration controlled by the West Flare | 40 CFR Part 63, Subpart UUU<br>40 CFR 63.1563(b) | See section A.I.2.a. |
| | 40 CFR 63.1563(e) | See section A.I.2.b. |
| | 40 CFR 63.1566(a) | See section A.I.2.c. |
| | 40 CFR 63.1567(a) | See section A.I.2.c. |
| | 40 CFR 63.1569(a) | See section A.I.2.c. |
| | 40 CFR 63.1577 | See section A.I.2.d. |
| | equipment leaks<br>40 CFR Part 63, Subpart A | See sections A.I.2.e. and 2.f. |
| | 40 CFR Part 63, Subpart CC<br>40 CFR 63.648 | See sections A.I.2.f. and 2.g. |
| | OAC rule 3745-21-09(T) | See section A.I.2.h. |

**2. Additional Terms and Conditions**

2.a. The permittee shall comply with the emission limitations and work practice standards for existing sources in 40 CFR Part 63, Subpart UUU by no later than April 11, 2005.

2.b. The permittee shall meet the notification requirements in 40 CFR 63.1574 [See section IV] according to the schedule in 40 CFR 63.1574 and in 40 CFR Part 63, Subpart A. Some of the notifications must be submitted before the date the permittee is required to comply with the emission limitations and work practice standards in this subpart.

2.c. The permittee shall comply with the applicable emission limitations specified in 40 CFR 63.1566(a)(1) [see Table 15 of section A.VI.]; 63.1567(a)(1) [see Table 16 of section A.VI.] and 63.1569(a)(1) [see Table 36 of section A.VI.] by no later than April 11, 2005.

i. [63.1566(a)(1)(i)]
The permittee can elect to vent emissions of total organic compounds (TOC) to a flare that meets the control device requirements in 40 CFR 63.11(b) (Option 1); or

ii. [63.1566(a)(1)(i)]
The permittee can elect to use a control device to meet a TOC percent reduction standard or concentration limit, whichever is less stringent (Option 2).

iii. [63.1567(a)(1); (a)(1)(i) and (a)(a)(ii)]
The permittee must meet each emission limitation in Table 22 [See section A.VI.] that applies to this emissions unit. These emission limitations apply during coke burn-off and catalyst rejuvenation. The permittee can choose from the following two options: elect to use a control device to meet either a percent reduction standard for hydrogen chloride (HCl) emissions (Option 1); or elect to meet an HCl concentration limit (Option 2).

iv. [63.1569(a)(1)(i) through (a)(1)(iv)]
The permittee can choose from four options for meeting with the work practice standards for bypass lines:
(a) Elect to install an automated system (Option 1);
(b) Elect to use a manual lock system (Option 2);
(c) Elect to seal the line (Option 3); or
(d) Elect to vent to a control device (Option 4).

v. [63.1569(a)(2)]
As provided in 40 CFR 63.6(g), the EPA, may choose to grant the permittee permission to use an alternative to the work practice standard in 40 CFR 63.1569(a)(1) [See section A.I.2.].

2.d. Table 44 [See section A.VI.] of 40 CFR Part 63, Subpart UUU shows which parts of the General Provisions in 40 CFR 63.1 through 63.15 apply.

2.e. 40 CFR Part 63, Subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 63.

2.f. Table 6 of 40 CFR Part 63, Subpart CC specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.g. Refer to Part II of this permit for the applicable equipment leak provisions found in sections A.I.2., A.II., A.III., A.IV. and A.V., referencing 40 CFR Part 60, Subpart VV.

2.h. Refer to Part II of this permit for the state requirements for equipment leaks found in sections A.I.2., A.II., A.III., A.IV. and A.V., referencing OAC rule 3745-21-09(T).

## II. Operational Restrictions

1. See the applicable sections in Part II for equipment leaks in A.II., referencing 40 CFR Part 60, Subpart VV. and OAC rule 3745-21-09(T).

2. 40 CFR Part 63, Subpart UUU
The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward.

   a. [63.1566] REQUIREMENTS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS

      i. [63.1566(a)(2)]
      The permittee shall comply with each site-specific operating limit in Table 16 [See section A.VI.] that applies to this emissions unit.

      ii. [63.1566(a)(3)]
      The emission limitations in Tables 15 and 16 [See section A.VI.] apply to emissions from catalytic reforming unit process vents that occur during depressuring and purging operations. These process vents include those used during unit depressurization, purging, coke burn, catalyst rejuvenation, and reduction or activation purge.

      iii. [63.1566(a)(4)]
      The emission limitations in Tables 15 and 16 [See section A.VI.] do not apply to emissions from process vents during depressuring and purging operations when the reactor vent pressure is 5 pounds per square inch gauge (psig) or less.

   b. [63.1567] REQUIREMENTS FOR INORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS - 40 CFR Part 63, Subpart UUU

      i. [63.1567(a)(2)]
      The permittee must meet each site-specific operating limit in Table 23 [See section A.VI.] that applies to this emissions unit. These operating limits apply during coke burn-off and catalyst rejuvenation.

## III. Monitoring and/or Record Keeping Requirements

1. See the applicable sections in Part II for equipment leaks in A.III., referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. 40 CFR Part 63, Subpart UUU

The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward.

a. [63.1566] REQUIREMENTS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS

i. [63.1566(a)(5)]
The permittee shall prepare an operation, maintenance, and monitoring plan according to the requirements in 40 CFR 63.1574(f) [See section A.III.] and operate at all times according to the procedures in the plan.

ii. [63.1566(b)(1)]
The permittee shall install, operate, and maintain a continuous monitoring system(s) according to the requirements in 40 CFR 63.1572 [See section A.III.] and Table 17 [See section A.VI.].

b. [63.1567] REQUIREMENTS FOR INORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS - 40 CFR Part 63, Subpart UUU

i. [63.1567(a)(3)]
The permittee must prepare an operation, maintenance, and monitoring plan according to the requirements in 40 CFR 63.1574(f) [See section A.III.] and operate at all times according to the procedures in the plan.

ii. [63.1567(b)(1)]
The permittee must install, operate, and maintain a continuous monitoring system(s) according to the requirements in 40 CFR 63.1572 [See section A.III.] and Table 24 [See section A.VI.].

c. [63.1569] REQUIREMENTS FOR HAP EMISSIONS FROM BYPASS LINES - 40 CFR Part 63, Subpart UUU
The work practice standards the permittee must meet are those of 63.1569(a)(1) and (a)(2) [See section A.I.2.] and the following:

i. [63.1569(a)(3)]
The permittee must prepare an operation, maintenance, and monitoring plan according to the requirements in 40 CFR 63.1574(f) [See section A.III.] and operate at all times according to the procedures in the plan.

d. [63.1570] GENERAL COMPLIANCE REQUIREMENTS - 40 CFR Part 63, Subpart UUU

i. [63.1570(a)]
The permittee must be in compliance with all of the non-opacity standards in this subpart during the times specified in 40 CFR 63.6(f)(1).

ii. [63.1570(b)]

The permittee must be in compliance with the opacity and visible emission limits in this subpart during the times specified in 40 CFR 63.6(h)(1).

iii. [63.1570(c)]
The permittee must always operate and maintain the affected emissions unit, including air pollution control and monitoring equipment, according to the provisions in 40 CFR 63.6(e)(1)(i). During the period April 11, 2005 and the date upon which continuous monitoring systems have been installed and validated and any applicable operating limits have been set, the permittee must maintain a log detailing the operation and maintenance of the process and emissions control equipment.

iv. [63.1570(d)]
The permittee must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in 40 CFR 63.6(e)(3).

v. [63.1570(e)]
During periods of startup, shutdown, and malfunction, the permittee must operate in accordance with the SSMP.

vi. [63.1570(f)]
The permittee must report each instance in which each emission limitation that was not met and each applicable operating limit in 40 CFR Part 63, Subpart UUU that was not met. This includes periods of startup, shutdown, and malfunction. The permittee also must report each instance in which the applicable work practice standards in 40 CFR Part 63, Subpart UUU were not met. These instances are deviations from the emission limitations and work practice standards in this subpart. These deviations must be reported according to the requirements in 40 CFR 63.1575 [See section A.IV.].

vii. [63.1570(g)]
Consistent with 40 CFR 63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if the permittee demonstrates to the Administrator's satisfaction that the permittee was operating in accordance with the SSMP. The SSMP must require that good air pollution control practices are used during those periods. The plan must also include elements designed to minimize the frequency of such periods (i.e., root cause analysis). The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in 40 CFR 63.6(e) and the contents of the SSMP.

e. [63.1572(c)] MONITORING, INSTALLATION, OPERATION, AND MAINTENANCE REQUIREMENTS [Table 41] - 40 CFR Part 63, Subpart UUU
The permittee must install, operate, and maintain each continuous parameter monitoring system according to the following paragraphs of this section.

i. [63.1572(c)(1)]
Each continuous parameter monitoring system must be installed, operated, and maintained according to the requirements in Table 41 [See section A.VI.] and in a manner consistent with the manufacturer's specifications or other written procedures that provide adequate assurance that the equipment will monitor accurately.

ii. [63.1572(c)(2)]
The continuous parameter monitoring system must complete a minimum of one cycle of operation for each successive 15-minute period. The permittee must have a minimum of four successive cycles of operation to have a valid hour of data (or at least two if a calibration check is performed during that hour or if the continuous parameter monitoring system is out-of-control).

iii. [63.1572(c)(3)]
Each continuous parameter monitoring system must have valid hourly average data from at least 75 percent of the hours during which the process operated.

iv. [63.1572(c)(4)]
Each continuous parameter monitoring system must determine and record the hourly average of all recorded readings and if applicable, the daily average of all recorded readings for each operating day. The daily average must cover a 24-hour period if operation is continuous or the number of hours of operation per day if operation is not continuous.

v. [63.1572(c)(5)]
Each continuous parameter monitoring system must record the results of each inspection, calibration, and validation check.

f. [63.1572(d)]
The permittee must monitor and collect data according to the requirements in 63.1572(d)(1) and (d)(2) [See section A.III].

i. [63.1572(d)(1)]
Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), the permittee must conduct all monitoring in continuous operation (or collect data at all required intervals) at all times the affected emissions unit is operating.

ii. [63.1572(d)(2)]
The permittee may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities for purposes of this regulation, including data averages and calculations, for fulfilling a minimum data availability requirement, if applicable. The permittee must use all the data collected during all other periods in assessing the operation of the control device and associated control system.

g. [63.1573] MONITORING ALTERNATIVES - 40 CFR Part 63, Subpart UUU

i. [63.1573(b)]
If the permittee uses a wet scrubber to control inorganic HAP emissions from the vent on a catalytic reforming unit, the permittee can measure and record the pH of the water (or scrubbing liquid) exiting the scrubber at least once an hour during coke burn-off and catalyst rejuvenation using pH strips as an alternative to a continuous parameter monitoring system. The pH strips must meet the requirements in Table 41 [See section A.VI.].

ii. [63.1576(c)]
The permittee may request approval from the permitting authority to use an automated data compression system. An automated data compression system does not record monitored operating parameter values at a set frequency (e.g., once every hour) but records all values that meet set criteria for variation from previously recorded values. The permittee's request must contain a description of the monitoring system and data recording system, including the criteria used to determine which monitored values are recorded and retained, the method for calculating daily averages, and a demonstration that the system meets all of the criteria in 63.1576(c)(1) through (5) [See section A.III]:

(a) [63.1573(c)(1)]
The system measures the operating parameter value at least once every hour;

(b) [63.1573(c)(2)]
The system records at least 24 values each day during periods of operation;

(c) [63.1573(c)(3)]
The system records the date and time when monitors are turned off or on;

(d) [63.1573(c)(4)]
The system recognizes unchanging data that may indicate the monitor is not functioning properly, alerts the operator, and records the incident; and

(e) [63.1573(c)(5)]
The system computes daily average values of the monitored operating parameter based on recorded data.

iii. [63.1573(d)] REQUESTING MONITORING ALTERNATIVES
The permittee may request approval to monitor parameters other than those required in this subpart. The permittee must request approval if:

(a) [63.1573(d)(1)]
The permittee uses a control device other than a thermal incinerator, boiler, process heater, flare, electrostatic precipitator, or wet scrubber;

(b) [63.1573(d)(2)]

The permittee uses a combustion control device (e.g., incinerator, flare, boiler or process heater with a design heat capacity of at least 44 MW, boiler or process heater where the vent stream is introduced into the flame zone), electrostatic precipitator, or scrubber but want to monitor a parameter other than those specified; or

(c) [63.1573(d)(3)]
The permittee wishes to use another type of continuous emission monitoring system that provides direct measurement of a pollutant (i.e., a PM or multi-metals HAP continuous emission monitoring system, a carbonyl sulfide/carbon disulfide continuous emission monitoring system, a TOC continuous emission monitoring system, or HCl continuous emission monitoring system).

iv. [63.1573(e)]
The permittee must submit a request for review and approval or disapproval to the Administrator. The request must include the information in 63.1573 (e)(1) through (5) [See section A.III].

(a) [63.1573(e)(1)]
A description of each affected emissions unit and the parameter(s) to be monitored to determine whether the affected source will continuously comply with the emission limitations and an explanation of the criteria used to select the parameter(s).

(b) [63.1573(e)(2)]
A description of the methods and procedures that will be used to demonstrate that the parameter can be used to determine whether the affected source will continuously comply with the emission limitations and the schedule for this demonstration. The permittee must certify that an operating limit will be established for the monitored parameter(s) that represents the conditions in existence when the control device is being properly operated and maintained to meet the emission limitation.

(c) [63.1573(e)(3)]
The frequency and content of monitoring, recording, and reporting, if monitoring and recording are not continuous. The permittee also must include the rationale for the proposed monitoring, recording, and reporting requirements.

(d) [63.1573(e)(4)]
Supporting calculations.

(e) [63.1573(e)(5)]
Averaging time for the alternative operating parameter.

h. [63.1574(f)] OPERATION, MAINTENANCE AND MONITORING PLAN - 40 CFR Part 63, Subpart UUU
As required by 40 CFR Part 63, Subpart UUU, the permittee must prepare and implement an operation, maintenance, and monitoring plan for each affected source, control system, and continuous monitoring system. The purpose of this plan is to detail the operation, maintenance, and monitoring procedures that the permittee will follow.

i. [63.1574(f)(1)]
The permittee must submit the plan to the Toledo Division of Environmental Services for review and approval along with the notification of compliance status. While the permittee does not have to include the entire plan in the part 70 or 71 permit, the permittee must include the duty to prepare and implement the plan as an applicable requirement in the part 70 or 71 operating permit. The permittee must submit any changes to the Toledo Division of Environmental Services for review and approval and comply with the plan until the change is approved.

ii. [63.1574(f)(2) and (f)(2)(i) through (x))]
Each plan must include, at a minimum, the information specified in paragraphs (f)(2)(i) through (x) of 40 CFR 63.1574[See section A.III].

(a) [63.1574(f)(2)(i)]
Process and control device parameters to be monitored for each affected source, along with established operating limits.

(b) [63.1574(f)(2)(ii)]
Procedures for monitoring emissions and process and control device operating parameters for each affected source.

(c) [63.1574(f)(2)(vi)]
Procedures the permittee will use to determine the HCl concentration of gases from a semi-regenerative catalytic reforming unit with an internal scrubbing system (i.e., no add-on control device) when you use a colormetric tube sampling system, including procedures for correcting for pressure (if applicable to the sampling equipment).

(d) [63.1574(f)(2)(v)]
Procedures you will use to determine the pH of the water (or scrubbing liquid) exiting a wet scrubber if the permittee uses pH strips.

(e) [63.1574(f)(2)(viii)]
Monitoring schedule, including when the permittee will monitor and will not monitor an affected emissions unit (e.g., during the coke burn-off, regeneration process).

(f) [63.1574(f)(2)(x)]

Maintenance schedule for each affected emissions unit, monitoring system, and control device that is generally consistent with the manufacturer's instructions for routine and long-term maintenance.

i. [63.1576] RECORD KEEPING REQUIREMENTS - 40 CFR Part 63, Subpart UUU

i. [63.1576(a)]
The permittee must keep the records specified in 63.1576(a)(1) through (3) [See section A.III].

(a) [63.1576(a)(1)]
A copy of each notification and report that the permittee submitted to comply with this subpart, including all documentation supporting any initial notification or Notification of Compliance Status that the permittee submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv).

(b) [63.1576(a)(2)]
The records in 40 CFR 63.6(e)(1)(iii) through (v) related to startup, shutdown, and malfunction.

(c) [63.1576(a)(3)]
Records of performance tests, performance evaluations, and visible emission observations as required in 40 CFR 63.10(b)(2)(viii).

ii. [63.1576(c)]
The permittee must keep the records in 40 CFR 63.6(h) for visible emission observations.

iii. [63.1576(d)]
The permittee must keep records required by Tables 20, 21, 27 and 28 [See section A.VI.] (for catalytic reforming units) and Table 39 [See section A.VI.] (for bypass lines) to show continuous compliance with each emission limitation that applies to this emissions unit.

iv. [63.1576(e)]
The permittee must keep a current copy of the operation, maintenance, and monitoring plan onsite and available for inspection. The permittee also must keep records to show continuous compliance with the procedures in the operation, maintenance, and monitoring plan.

v. [63.1576(f)]
The permittee also must keep the records of any changes that affect emission control system performance including, but not limited to, the location at which the vent stream is introduced into the flame zone for a boiler or process heater.

vi. [63.1576(g)]

The records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1).

vii. [63.1576(h)]
As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

viii. [63.1576(i)]
The permittee must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee can keep the records offsite for the remaining 3 years.

## IV. Reporting Requirements

1. See the applicable sections in Part II for equipment leaks in A.IV., referencing 40 CFR Part 60, Subpart VV. and OAC rule 3745-21-09(T).

2. 40 CFR Part 63, Subpart UUU
The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward.

a. [63.1574] NOTIFICATION SUBMITTAL - 40 CFR Part 63, Subpart UUU
i. [63.1574(a)]
Except as allowed in 40 CFR 63.1574(a)(2) and (a)(3) [See section A.IV], the permittee must submit all of the notifications in 40 CFR 63.6(h), 63.7(b) and (c), 63.8(e), 63.8(f)(4), 63.8(f)(6), and 63.9(b) through (h) that apply to this emissions unit by the dates specified.

(a) [63.1574(a)(2)]
The permittee must submit the notification of intent to conduct a performance test required in 40 CFR 63.7(b) at least 30 calendar days before the performance test is scheduled to begin (instead of 60 days).

(b) [63.1574(a)(3)]
If the permittee is required to conduct a performance test, performance evaluation, design evaluation, visible emission observation, or other initial compliance demonstration, the permittee must submit a notification of compliance status according to 40 CFR 63.9(h)(2)(ii). The permittee can submit this information in an operating permit application, in an amendment to an operating permit application, in a separate submission, or in any combination. If the required information has been submitted previously, the permittee does not have to provide a separate notification of compliance status. Just refer to the earlier submissions instead of duplicating and resubmitting the previously submitted information.
(i) [63.1574(a)(3)(i)]

For each initial compliance demonstration that does not include a performance test, the permittee must submit the Notification of Compliance Status no later than 30 calendar days following completion of the initial compliance demonstration.

(ii) [63.1574(a)(3)(ii)]
For each initial compliance demonstration that includes a performance test, the permittee must submit the notification of compliance status, including the performance test results, no later than 150 calendar days after April 11, 2005.

ii. [63.1574(c)]
As specified in 40 CFR 63.9(b)(3), if the permittee starts the new or reconstructed affected source on or after April 11, 2002, the permittee must submit the initial notification no later than 120 days after April 11, 2005.

iii. [63.1574(d)]
The permittee also must include the information in Table 42 [See section A.VI.] in your notification of compliance status.

b. [63.1575] REPORTS FOR 40 CFR Part 63, Subpart UUU

i. [63.1575(a)]
The permittee must submit each report in Table 43 [See section A.VI.] that applies to this emissions unit.

ii. [63.1575(b)]
Unless the Administrator has approved a different schedule, the permittee must submit each report by the date in Table 43 [See section A.VI.] and according to the requirements in 40 CFR 63.1575(b)(1) through (b)(5) [See section A.IV].

(a) [63.1575(b)(1)]
The first compliance report must cover the period beginning April 11, 2005 and ending on June 30, 2005.

(b) [63.1575(b)(2)]
The first compliance report must be postmarked or delivered no later than July 31, 2005.

(c) [63.1575(b)(3)]
Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(d) [63.1575(b)(4)]
Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(e) [63.1575(b)(5)]
For each affected emissions unit that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A), the permittee may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in 63.1575(b)(1) through (b)(4) [See section A.IV].

iii. [63.1575(c)]
The compliance report must contain the following information:

(a) [63.1575(c)(1)]
Company name and address.

(b) [63.1575(c)(2)]
Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

(c) [63.1575(c)(3)]
Date of report and beginning and ending dates of the reporting period.

(d) [63.1575(c)(4)]
If there are no deviations from any emission limitation that applies to this emissions unit and there are no deviations from the requirements for work practice standards, a statement that there were no deviations from the emission limitations or work practice standards during the reporting period.

iv. [63.1575(d)]
For each deviation from an emission limitation and for each deviation from the requirements for work practice standards that occurs at an affected emissions unit where a continuous opacity monitoring system or a continuous emission monitoring system is not used to comply with the emission limitation or work practice standard in 40 CFR Part 63, Subpart UUU, the compliance report must contain the information in 63.1575(c)(1) through (c)(3) [See section A.IV] and the information in 63.1575(d)(1) through (d)(3) [See section A.IV].

(a) [63.1575(d)(1)]
The total operating time of each affected emissions unit during the reporting period.

(b) [63.1575(d)(2)]
Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(c) [63.1575(d)(3)]
Information on the number, duration, and cause for monitor downtime incidents (including unknown cause, if applicable, other than downtime associated with zero and span and other daily calibration checks).

v. [63.1575(f)]
The permittee also must include the information required in 63.1575(f)(1) through (f)(2) [See section A.IV] in each compliance report, if applicable.

(a) [63.1575(f)(1)]
A copy of any performance test done during the reporting period on any affected unit. The report may be included in the next semiannual report. The copy must include a complete report for each test method used for a particular kind of emission point tested. For additional tests performed for a similar emission point using the same method, the permittee must submit the results and any other information required, but a complete test report is not required. A complete test report contains a brief process description; a simplified flow diagram showing affected processes, control equipment, and sampling point locations; sampling site data; description of sampling and analysis procedures and any modifications to standard procedures; quality assurance procedures; record of operating conditions during the test; record of preparation of standards; record of calibrations; raw data sheets for field sampling; raw data sheets for field and laboratory analyses; documentation of calculations; and any other information required by the test method.

(b) [63.1575(f)(2)]
Any requested change in the applicability of an emission standard (e.g., changing from the PM standard to the Ni standard for catalytic cracking units or from the HCl concentration standard to percent reduction for catalytic reforming units) in the periodic report. The permittee must include all information and data necessary to demonstrate compliance with the new emission standard selected and any other associated requirements.

vi. [63.1575(g)]
The permittee may submit reports required by other regulations in place of or as part of the compliance report if they contain the required information.

vii. [63.1575(h)]
The reporting requirements in paragraphs 63.1575(h)(1) and (2) [See section A.IV] apply to startups, shutdowns, and malfunctions:

(a) [63.1575(h)(1)]
When actions taken to respond are consistent with the plan, the permittee is not required to report these events in the semiannual compliance report and the reporting requirements in 40 CFR 63.6(e)(3)(iii) and 63.10(d)(5) do not apply.

(b) [63.1575(h)(2)]
When actions taken to respond are not consistent with the plan, the permittee must report these events and the response taken in the semiannual compliance report. In this case, the reporting requirements in 40 CFR 63.6(e)(3)(iv) and 63.10(d)(5) do not apply.

3. General Reporting Requirements

a. All requests, reports, applications, submittals, and other communications pursuant to this permit shall be submitted to: Toledo Division of Environmental Services, Air Resources Section, 348 South Erie Street, Toledo, Ohio 43602-1633.

b. All requests, reports, applications, submittals, and other communications to the Administrator pursuant to this permit shall be submitted to: Director Ohio EPA c/o Bob Hodanbosi, Ohio EPA, Lazarus Government Center, P.O. Box 1049, Columbus, OH 43216-1049.

c. If any State requires a submittal that contains all the information required in an application, notification, request, report, statement, or other communication required in this part, the permittee may send the appropriate Regional Office of the EPA a copy of that submittal to satisfy the requirements of this part for that communication.

If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

## V. Testing Requirements

1. See the applicable sections in Part II for equipment leaks in A.V., referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. 40 CFR Part 63, Subpart UUU
The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward.

a. [63.1566] DEMONSTRATING INITIAL COMPLIANCE REQUIREMENTS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS - 40 CFR Part 63, Subpart UUU

i. [63.1566(b)(2)]
The permittee shall conduct each performance test for a catalytic reforming unit according to the requirements in 40 CFR 63.1571 [See section A.V.] and under the conditions specified in Table 18 [See section A.VI.] of this subpart.

ii. [63.1566(b)(3)]

The permittee shall establish each site-specific operating limit in Table 16 [See section A.VI.] that applies to this source according to the procedures in Table 18 [See section A.VI.].

iii. [63.1566(b)(4) and (b)(5)]
Use the procedures in 63.1566(b)(4)(i) or (b)(5) [See section A.V] to determine initial compliance with the emission limitations.

(a) [63.1566(b)(4)(i)]
If the permittee elects the percent reduction standard under Option 2, calculate the emission rate of TOC using Equation 1 of this section (if you use Method 25) or Equation 2 of this section (if you use Method 25A); then calculate the mass emission reduction using Equation 3 of this section as stated in 40 CFR 63.1566(b)(4)(i).

(b) [63.1566(b)(b)(5)]
If the permittee elects the 20 parts per million by volume (ppmv) concentration limit, correct the measured TOC concentration for oxygen ($O_2$) content in the gas stream using Equation 4 of this section as stated in 40 CFR 63.1566(b)(5).

iv. [63.1566(b)(6)]
The permittee is not required to do a TOC test if:

(a) [63.1566(b)(6)(i)]
The permittee elects to vent emissions to a flare as provided in 40 CFR 63.1566(a)(1)(i) [See section A.I.2.] (Option 1); or

(b) [63.1566(b)(6)(ii)]
The permittee elects the TOC percent reduction or concentration limit 40 CFR 63.1566(a)(1)(ii) (Option 2), and uses a boiler or process heater with a design heat input capacity of 44 MW or greater or a boiler or process heater in which all vent streams are introduced into the flame zone.

v. [63.1566(b)(7)]
The permittee must demonstrate initial compliance with each applicable emission limitation according to Table 19 [See section A.IV.].

vi. [63.1566(b)(8)]
The permittee must demonstrate initial compliance with the work practice standard in 40 CFR 63.1566(a)(5) [See section A.III.] by submitting the operation, maintenance, and monitoring plan to the Toledo Division of Environmental Services as part of the Notification of Compliance Status.

vii. [63.1566(b)(9)]
The permittee shall submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 40 CFR 63.1574 [See section A.IV.].

viii. [63.1566(c)(1)]
The permittee shall demonstrate continuous compliance with each emission limitation in Tables 15 and 16 [See section A.VI.] that applies to this source according to the methods specified in Tables 20 and 21 [See section A.VI.].

ix. [63.1566(c)(2)]
The permittee shall demonstrate continuous compliance with the work practice standards in 40 CFR 63.1566(a)(3) [See section A.II.] by complying with the procedures in your operation, maintenance, and monitoring plan.

b. [63.1567] DEMONSTRATING CONTINUOUS COMPLIANCE WITH THE INORGANIC HAP EMISSION LIMITATIONS AND WORK PRACTICE STANDARDS - 40 CFR Part 63, Subpart UUU

i. [63.1567(b)(2)]
The permittee must conduct each performance test for a catalytic reforming unit according to the requirements in 40 CFR 63.1571[See section A.V.] and the conditions specified in Table 25 [See section A.VI.].

ii. [63.1567(b)(3)]
The permittee must establish each site-specific operating limit in Table 23 [See section A.VI.] that applies to this emissions unit according to the procedures in Table 25 [See section A.VI.].

iii. [63.1567(b)(4)]
The permittee must demonstrate initial compliance with each applicable emission limitation that applies according to Table 26 [See section A.VI.].

iv. [63.1567(b)(5)]
The permittee must demonstrate initial compliance with the work practice standard in 40 CFR 63.1567(a)(3) [See section A.III.] by submitting the operation, maintenance, and monitoring plan to the Toledo Division of Environmental Services as part of your Notification of Compliance Status.

v. [63.1567(b)(6)]
The permittee must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 40 CFR 63.1574 [See section A.IV.].

vi. [63.1567(c)(1)]
The permittee must demonstrate continuous compliance with each emission limitation in Tables 22 and 23 [See section A.VI.] that applies to this source according to the methods specified in Tables 27 and 28 [See section A.VI.].

vii. [63.1567(c)(2)]
The permittee must demonstrate continuous compliance with the work practice standard in 40 CFR 63.1567(a)(3) [See section A.II.] by maintaining records to

document conformance with the procedures in the operation, maintenance and monitoring plan.

c. [63.1569(c)] DEMONSTRATING CONTINUOUS COMPLIANCE FOR HAP EMISSIONS FROM BYPASS LINES - 40 CFR Part 63, Subpart UUU
The permittee shall demonstrate initial compliance with the work practice standards for bypass lines as stated in the following:

i. [63.1569(b)(1)]
If the permittee elects the option in 40 CFR 63.1569(a)(1)(i) [See section A.I.2.], the permittee must conduct each performance test for a bypass line according to the requirements in 63.1571 [See section A.V.] and under the conditions specified in Table 37 [See section A.VI.].

ii. [63.1569(b)(2)]
The permittee must demonstrate initial compliance with each work practice standard in Table 36 [See section A.VI.] that applies to this emissions unit according to Table 38 [See section A.VI.].

iii. [63.1569(b)(3)]
The permittee must demonstrate initial compliance with the work practice standard in 63.1569(a)(3) [See section A.III] by submitting the operation, maintenance, and monitoring plan to the Toledo Division of Environmental Services as part of the notification of compliance status.

iv. [63.1569(b)(4)]
The permittee must submit the notification of compliance status containing the results of the initial compliance demonstration according to the requirements in 40 CFR 63.1574 [See section A.IV.].

v. [63.1569(c)(1)]
The permittee must demonstrate continuous compliance with each work practice standard in Table 36 [See section A.VI.] that applies according to the requirements in Table 39 [See section A.VI.].

vi. [63.1569(c)(2)]
The permittee must demonstrate continuous compliance with the work practice standard in 40 CFR 63.1569(a)(2) [See section A.III.] by complying with the procedures in the operation, maintenance, and monitoring plan.

d. [63.1571] PERFORMANCE TEST AND OTHER INITIAL COMPLIANCE DEMONSTRATION - 40 CFR Part 63, Subpart UUU

i. [63.1571(a)]
The permittee must conduct performance tests and report the results by no later than 150 days after April 11, 2005 and according to the provisions in 40 CFR 63.6(a)(2) of Subpart A. If the permittee is required to do a performance

evaluation or test for a semi-regenerative catalytic reforming unit catalyst regenerator vent, the permittee may do them at the first regeneration cycle after April 11, 2005 and report the results in a followup Notification of Compliance Status report due no later than 150 days after the test.

(a) [63.1571(a)(1)]
For each emission limitation or work practice standard where initial compliance is not demonstrated using a performance test, opacity observation, or visible emission observation, the permittee must conduct the initial compliance demonstration within 30 calendar days after April 11, 2005.

(b) [63.1571(a)(2)]
For each emission limitation where the averaging period is 30 days, the 30-day period for demonstrating initial compliance begins at 12:00 a.m. on April 11, 2005 and ends at 11:59 p.m., May 11, 2005.

ii. [63.1571(b)] GENERAL REQUIREMENTS FOR PERFORMANCE TESTS AND PERFORMANCE EVALUATIONS
The permittee must:

(a) [63.1571(b)(1)]
Conduct each performance test according to the requirements in 40 CFR 63.7(e)(1).

(b) [63.1571(b)(2)]
Except for opacity and visible emission observations, conduct three separate test runs for each performance test as specified in 40 CFR 63.7(e)(3). Each test run must last at least 1 hour.

(c) [63.1571(b)(3)]
Conduct each performance evaluation according to the requirements in 40 CFR 63.8(e).

(d) [63.1571(b)(4)]
Not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in 40 CFR 63.7(e)(1).

(e) [63.1571(b)(5)]
Calculate the average emission rate for the performance test by calculating the emission rate for each individual test run in the units of the applicable emission limitation using Equation 2, 5, or 8 of 40 CFR 63.1564, and determining the arithmetic average of the calculated emission rates.

iii. [63.1571(c)] ENGINEERING ASSESSMENT
The permittee may choose to use an engineering assessment to calculate the process vent flow rate, net heating value, TOC emission rate, and total organic

HAP emission rate expected to yield the highest daily emission rate when determining the emission reduction or outlet concentration for the organic HAP standard for catalytic reforming units. If an engineering assessment is used, the permittee must document all data, assumptions, and procedures to the satisfaction of the Toledo Division of Environmental Services. An engineering assessment may include the approaches listed in 40 CFR 63.1571(c)(1) through (c)(4) See section A.V]. Other engineering assessments may be used but are subject to review and approval by the Toledo Division of Environmental Services.

(a) [63.1571(c)(1)]
The permittee may use previous test results provided the tests are representative of current operating practices at the emissions unit, and provided EPA methods or approved alternatives were used;

(b) [63.1571(c)(2)]
The permittee may use bench-scale or pilot-scale test data representative of the process under representative operating conditions;

(c) [63.1571(c)(3)]
The permittee may use maximum flow rate, TOC emission rate, organic HAP emission rate, or organic HAP or TOC concentration specified or implied within a permit limit applicable to the process vent; or

(d) [63.1571(c)(4)]
The permittee may use design analysis based on engineering principles, measurable process parameters, or physical or chemical laws or properties. Examples of analytical methods include, but are not limited to:

(i) [63.1571(c)(4)(i)]
Use of material balances based on process stoichiometry to estimate maximum TOC concentrations;

(ii) [63.1571(c)(4)(ii)]
Calculation of hourly average maximum flow rate based on physical equipment design such as pump or blower capacities; and

(iii) [63.1571(c)(4)(iii)]
Calculation of TOC concentrations based on saturation conditions.

iv. [63.1571(d)] ADJUSTING THE PROCESS OR CONTROL DEVICE MEASURED VALUES WHEN ESTABLISHING AN OPERATING LIMIT
If the permittee does a performance test to demonstrate compliance, the permittee must base the process or control device operating limits for continuous parameter monitoring systems on the results measured during the performance test.

i. [63.1571(d)(4)]
If the permittee uses continuous parameter monitoring systems, the permittee may adjust one of the monitored operating parameters (flow rate, voltage and secondary current, pressure drop, liquid-to-gas ratio) from the average of measured values during the performance test to the maximum

value (or minimum value, if applicable) representative of worst-case operating conditions, if necessary. This adjustment of measured values may be done using control device design specifications, manufacturer recommendations, or other applicable information. The permittee must provide supporting documentation and rationale in your Notification of Compliance Status, demonstrating to the satisfaction of the Toledo Division of Environmental Services, that the affected source complies with the applicable emission limit at the operating limit based on adjusted values.

v. [63.1571(e)]
The permittee may change the established operating limit by meeting the requirements in 63.1571(e)(1) through (3) [See section A.V].

(a) [63.1571(e)(1)]
The permittee may change the established operating limit for a continuous parameter monitoring system by doing an additional performance test, a performance test in conjunction with an engineering assessment, or an engineering assessment to verify that, at the new operating limit, you are in compliance with the applicable emission limitation.

(b) [63.1571(e)(2)]
The permittee must establish a revised operating limit for the continuous parameter monitoring system if changes are made in the process or operating conditions that could affect control system performance or designated conditions are changed after the last performance or compliance tests were done. The permittee can establish the revised operating limit as described in 63.1571(e)(1) [See section A.V].

(c) [63.1571(e)(3)]
The permittee may change the site-specific opacity operating limit only by doing a new performance test.

## VI. Miscellaneous Requirements

1. 40 CFR Part 63, Subpart UUU
The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward.

a. The following tables from 40 CFR Part 63, Subpart UUU are attached:
Tables 15; 16; 17; 18 ; 19; 20; 21; 22; 23; 24; 25; 26; 27; 28; 36; 37; 38; 39; 41; 42; 43 and 44.

**TABLE 15 TO Subpart UUU OF PART 63.**—ORGANIC HAP EMISSION LIMITS FOR CATALYTIC REFORMING UNITS

[As stated in § 63.1566(a)(1), you must meet each emission limitation in the following table that applies to you]

| For each new or existing catalytic reforming unit * * * | You must meet this emission limit for each process vent during depressuring and purging operation * * * |
|---|---|
| 1. Option 1 ..... | Vent emissions to a flare that meets the requirements for control devices in § 63.11(b). Visible emissions from a flare must not exceed a total of 5 minutes during any 2-hour operating period. |
| 2. Option 2 ..... | Using a control device, reduce uncontrolled emissions of total organic compounds (TOC) from your process vent by 98 percent by weight or to a concentration of 20 ppmv (dry basis), corrected to 3 percent oxygen, whichever is less stringent. If you vent emissions to a boiler or process heater to comply with the percent reduction or concentration emission limitation, the vent stream must be introduced into the flame zone, or any other location that will achieve the percent reduction or concentration standard. |

**TABLE 16 TO Subpart UUU OF PART 63.**—OPERATING LIMITS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS

[As stated in § 63.1566(a)(2), you must meet each operating limit in the following table that applies to you]

| For each new or existing catalytic reforming unit * * * | For this type of control device * * * | You must meet this operating limit during depressuring and purging operations * * * |
|---|---|---|
| 1. Option 1: vent to flare ..... | Flare that meets the requirements for control devices in § 63.11(b). | The flare pilot light must be present at all times and the flare must be operating at all times that emissions may be vented to it. |
| 2. Option 2: percent reduction or concentration limit. | Thermal incinerator, boiler or process heater with a design heat input capacity under 44 MW, or boiler or process heater in which all vent streams are not introduced into the flame zone. | The daily average combustion zone temperature must not fall below the limit established during the performance test. |

**TABLE 17 TO Subpart UUU OF PART 63.**—CONTINUOUS MONITORING SYSTEMS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS

[As stated in § 63.1566(b)(1), you must meet each requirement in the following table that applies to you]

| For each new or exiting catalytic reforming unit * * * | If you use this type of control device * * * | You must install and operate this type of continuous monitoring system * * * |
|---|---|---|
| 1. Option 1: vent to a flare ..... | Flare that meets the requirements for control devices in § 63.11(b). | Monitoring device such as a thermocouple, an ultraviolet beam sensor, or infrared sensor to continuously detect the presence of a pilot flame. |
| 2. Option 2: percent reduction or concentration limit. | Thermal incinerator, process heater or boiler with a design heat input capacity under 44 MW, or process heater or boiler in which all vent streams are not introduced into the flame zone. | Continuous parameter monitoring systems to measure and record the combustion zone temperature. |

**TABLE 18 TO Subpart UUU OF PART 63.**—REQUIREMENTS FOR PERFORMANCE TESTS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS

[As stated in § 63.1566(b)(2) and (3), you must meet each requirement in the following table that applies to you

| For each new or exiting catalytic reforming unit * * * | You must * * * | Using * * * | According to these requirements * * * |
|---|---|---|---|
| 1. Option 1: vent to a flare. ..... | a. Conduct visible emission observations. | Method 22 (40 CFR Part 60, Appendix A). | 2-hour observation period. Record the presence of a flame at the pilot light over the full period of the test. |
| | b. Determine that the flare meets the requirements for net heating value of the gas being combusted and exit velocity. | Not applicable ..... | 40 CFR 60.11(b)(6) through (8). |
| 2. Option 2: percent reduction or concentration limit. | a. Select sampling site ..... | Method 1 or 1A (40 CFR part 60, Appendix A). No traverse site selection method is needed for vents smaller than 0.10 meter in diameter. | Sampling sites must be located at the inlet (if you elect the emission reduction standard) and outlet of the control device and prior to any releases to the atmosphere. |
| | b. Measure gas volumetric flow rate. | Method 2, 2A, 2C, 2D, 2F, or 2G (40 CFR Part 60, Appendix A), as applicable. | |
| | c. Measure TOC concentration (for percent reduction standard). | Method 25 (40 CFR Part 60, Appendix A) to measure TOC concentration at the inlet and outlet of the control device. If the TOC outlet concentration is expected to be less than 50 ppm, you can use Method 25A to measure TOC concentration at the inlet and the outlet of the control device. | Take either an integrated sample or four grab samples during each run. If you use a grab sampling technique, take the samples at approximately equal intervals in time, such as 15-minute intervals during the run. |
| | d. Calculate TOC emission rate and mass emission reduction. | Calculate emission rate by Equation 1 of § 63.1566 (if you use Method 25) or Equation 2 of § 63.1566 (if you use Method 25A). Calculate mass emission reduction by Equation 3 of § 63.1566. | |
| | e. Measure TOC concentration (for concentration standard). | Method 25A (40 CFR Part 60, appendix A) to measure TOC concentration at the outlet of the control device. | |
| | f. Determine oxygen content in the gas stream at the outlet of the control device. | Method 3A or 3B (40 CFR part 60, Appendix A), as applicable. | |
| | g. Correct the measured TOC concentration for oxygen content. | Equation 4 of § 63.1566 | |
| | h. Established each operating limit in Table 16 of this subpart that applies to you for a thermal incinerator, or process heater or boiler with a design heat input capacity under 44 | Data from the continuous parameter monitoring systems. | Collect the temperature monitoring data every 15 minutes during the entire period of the initial TOC performance test. Determine and record the minimum hourly average combustion |

| | | | |
|---|---|---|---|
| | MW, or process heater or boiler in which all vent streams are not introduced into the flame zone. | | zone temperature. |

**TABLE 19 TO Subpart UUU OF PART 63**—INITIAL COMPLIANCE WITH ORGANIC HAP EMISSION LIMITS FOR CATALYTIC REFORMING UNITS

[As stated in § 63.1566(b)(7), you must meet each requirement in the following table that applies to you.]

| For . . . | For the following emission limit ... | You have demonstrated initial compliance if . . . |
|---|---|---|
| 1. Each new and existing catalytic reforming unit. | a. Visible emissions from a flare must not exceed a total of 5 minutes during any 2 consecutive hours.<br><br>b. Reduce uncontrolled emissions of TOC from your process vent using a control device, by 98 percent by weight or to a concentration of 20 ppmv, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent. | Visible emissions, measured using Method 22 over the 2-hour observation period of the performance test do not exceed a total of 5 minutes.<br><br>The mass emission reduction measured using Method 25 over the period of the performance test, is at least 98 percent by weight. The mass emission reduction is calculated using Equations 1 (or 2) and 3 of § 63.1566 or the TOC concentration, measured by Method 25A over the period of the performance test, does not exceed 20 ppmv (dry basis), corrected to 3 percent oxygen using Equation 4 of § 63.1566. |

**TABLE 20 TO Subpart UUU OF PART 63.**—CONTINUOUS COMPLIANCE WITH ORGANIC HAP EMISSION LIMITS FOR CATALYTIC REFORMING UNITS

[As stated in § 63.1566(c)(1), you must meet each requirement in the following table that applies to you]

| For * * * | For this emission limit * * * | You must demonstrate continuous compliance during depressuring and purging by * * * |
|---|---|---|
| 1. Option 1: Each new or existing catalytic reforming unit. | Vent emissions from your process vent to a flare that meets the requirements in § 63.11(b). | Maintaining visible emissions from a flare below a total of 5 minutes during any 2 consecutive hours. |
| 2. Option 2: Each new or existing catalytic reforming unit. | Using a control device, reduce uncontrolled emissions of TOC from your process vent by 98 percent by weight or to a concentration of 20 ppmv, (dry basis), corrected to 3 percent oxygen, whichever is less stringent. | Maintaining a 98 percent by weight TOC emission reduction; or maintaining a TOC concentration of not more than 20 ppmv (dry basis), corrected to 3 percent oxygen, whichever is less stringent. |

**TABLE 20 TO Subpart UUU OF PART 63.**—CONTINUOUS COMPLIANCE WITH ORGANIC HAP EMISSION LIMITS FOR CATALYTIC REFORMING UNITS

[As stated in § 63.1566(c)(1), you must meet each requirement in the following table that applies to you]

| For * * * | For this emission limit * * * | You must demonstrate continuous compliance during depressuring and purging by * * * |
|---|---|---|
| 1. Option 1: Each new or existing catalytic reforming unit. | Vent emissions from your process vent to a flare that meets the requirements in § 63.11(b). | Maintaining visible emissions from a flare below a total of 5 minutes during any consecutive hours. |
| 2. Option 2: Each new or existing catalytic reforming unit. | Using a control device, reduce uncontrolled emissions of TOC from your process vent by 98 percent by weight or to a concentration of 20 ppmv, (dry basis), corrected to 3 percent oxygen, whichever is less stringent. | Maintaining a 98 percent by weight TOC emission reduction; or maintaining a TOC concentration of not more than 20 ppmv (dry basis), corrected to 3 percent oxygen, whichever is less stringent. |

**TABLE 21 TO Subpart UUU OF PART 63.**—CONTINUOUS COMPLIANCE WITH OPERATING LIMITS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS

[As stated in § 63.1566(c)(1), you must meet each requirement in the following table that applies to you]

| For * * * | If you use * * * | For this operating limit * * * | You must demonstrate continuous compliance during depressuring and purging by * * * |
|---|---|---|---|
| 1. Each new or existing catalytic reforming unit. | a. Flare that meets the requirements in § 63.11(b). | The flare pilot light must present at all times and flare must be operating times that emissions may vented to it. | Collecting flare monitoring data according to § 63.1572; and recording for each 1-hour period whether the monitor was continuously operating and the pilot light was continuously present during each 1-hour period. |
| | b. Thermal incinerator, boiler or process heater with a design input capacity under 44 MW or boiler or process heater in which all vent streams are not introduced into the flame zone. | Maintain the daily average combustion zone temperature above the limit established during the performance test. | Collecting the hourly and daily temperature monitoring data according to § 63.1572; and maintaining the daily average combustion zone temperature above the limit established during the performance test. |

**TABLE 22 TO Subpart UUU OF PART 63**—INORGANIC HAP EMISSION LIMITS FOR CATALYTIC REFORMING UNITS

[As stated in § 63.1567(a)(1), you must meet each emission limitation in the following table that applies to you]

| For * * * | You must meet this emission limit for your process vent during coke burn-off and catalyst rejuvenation * * * |
|---|---|
| 1. Each existing semi-regenerative catalytic reforming unit. | Reduce uncontrolled emissions of hydrogen chloride (HC1) by 92 percent by weight using a control device or to a concentration of 30 ppmv (dry basis), corrected to 3 percent oxygen. |
| 2. Each existing cyclic or continuous catalytic reforming unit. | Reduce uncontrolled emissions of HC1 by 97 percent by weight using a control device or to a concentration of 10 ppmv (dry basis), corrected to 3 percent oxygen. |
| 3. Each new semi-regenerative, cyclic, or continuous catalytic reforming unit. | Reduce uncontrolled emissions of HC1 by 97 percent by weight using a control device or to a concentration of 10 ppmv (dry basis), corrected to 3 percent oxygen. |

| | |
|---|---|

**TABLE 23 TO Subpart UUU OF PART 63.**—OPERATING LIMITS FOR INORGANIC HAP EMISSION LIMITATIONS FOR CATALYTIC REFORMING UNITS

[As stated in § 63.1567(a)(2), you must meet each operating limit in the following table that applies to you]

| For * * * | If you use this type of control device * * * | You must meet this operating limit during coke burn-off and catalytst rejuvenation . . . |
|---|---|---|
| 1. Each new or existing catalytic reforming unit | a. Wet scrubber ..... | The daily average pH of the water (or scrubbing liquid) exiting the scrubber must not fall below the limit established during the performance test; and the daily average liquid-to-gas ratio must not fall below the limit established during the performance test. |
| | b. Internal scrubbing system (i.e., no add-on control device). | The HCl concentration in the catalyst regenerator exhaust gas must not exceed the limit established during the performance test. |

**TABLE 24 TO Subpart UUU OF PART 63.**—CONTINUOUS MONITORING SYSTEMS FOR INORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS

[As stated in § 63.1567(b)(1), you must meet each requirement in the following table that applies to you]

| If you use this type of control device for your vent * * * | You must install and operate this type of continuous monitoring system * * * |
|---|---|
| 1. Wet scrubber ..... | Continuous parameter monitoring system to measure and record the pH of the water (or scrubbing liquid) exiting the scrubber during coke burn-off and catalyst rejuvenation. If applicable, you can use the alternative in § 63.1573 instead of a continuous parameter monitoring system for pH of the water (or scrubbing liquid); and continuous parameter monitoring systems to measure and record the gas flow rate to the scrubber and the total water (or scrubbing liquid) flow rate to the scrubber during coke burn-off and catalyst rejuvenation. |
| 2. Internal scrubbing system (i.e., no addon control device). | Colormetric tube sampling system to measure the HCl concentration in the catalyst regenerator exhaust gas during coke burn-off and catalyst rejuvenation. |

**TABLE 25 TO Subpart UUU OF PART 63.**—REQUIREMENTS FOR PERFORMANCE TESTS FOR INORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS

[As stated in § 63.1567(b)(2) and (3), you must meet each requirement in the following table that applies to you]

| If you use this type of control device or system * * * | You must * * * | Using * * * | According to these requirements * * * |
|---|---|---|---|
| 1. Wet scrubber ..... | a. Measure the HCl concentration at the outlet of the control device (for the concentration standard) or at the inlet and outlet of the control d4evice (for the percent reduction standard). | i. Method 26A (40 CFR part 60, Appendix A). | (1) Sampling rate must be at least 0.014 dscm/min (0.5 dscf/min). You must do the test during the coke burn-off and catalyst rejuvenation cycle, but don't make any test runs during the first hour or the last 6 hours of the cycle.<br><br>(2) Record the total amount (rate) of scrubbing liquid or solution and the amount (rate) of makeup liquid to the scrubber during each test run. |
| | b. Establish operating limit for pH level. | ..... | (1) Measure and record the pH of the water (or scrubbing liquid) exiting the scrubber every 15 minutes during the entire period of the performance test. Determineand record the hourly average pH level from the recorded values.<br><br>(2) If you use the alternative method in § 63.1573, measure and record the pH of the water (or scrubbing liquid) exiting the scrubber during coke burn-off and catalyst rejuvenation using pH strips at least three times during each run. Determine and record the average pH level. |
| | c. Establish operating limit for liquid- to-gas ratio. | Data from the continuous parameter monitoring systems. | Measure and record the gas flow rate to the scrubber and the total water (or scrubbing liquid) flow rate to the scrubber every 15 minutes during the entire period of the performance test. Determine and record the hourly average gas flow rate and total water (or scrubbing liquid) flow rate. Determine and record the minimum liquid-to-gas ratio. |
| 2. Internal scrubbing system (i.e., no add-on control device). | a. Measure the concentration of HCl in the catalyst regenerator exhaust gas. | Method 26 (40 CFR Part 60, Appendix A). | Sampling rate must be at least 0.014 dscm/min (0.5 dscf/min). You must do the test during the coke burn-off and catalyst rejuvenation cycle, but don't make any test runs during the first hour or the last 6 hours of the cycle. |
| | b. Establish operating limit for HCl concentration. | Measure and record the HCl concentration in the catalyst regenerator exhaust gas using the colorimetric tube sampling system at least three times during each test run. Determine and | |

| | | | |
|---|---|---|---|
| | | record the average HCl concentration. | |

**TABLE 26 TO Subpart UUU OF PART 63.**—INITIAL COMPLIANCE WITH INORGANIC HAP EMISSION LIMITS FOR CATALYTIC REFORMING UNITS

[As stated in § 63.1567(b)(4), you must meet each requirement in the following table that applies to you]

| For* * * | For the following emission limit * * * | You have demonstrated initial compliance if * * * |
|---|---|---|
| 1. Each existing semi-regenerative catalytic reforming unit. | Reduce uncontrolled emissions of HCl by 92 percent by weight using a control device or to a concentration of 30 ppmv, (dry basis), corrected to 3 percent oxygen. | Average emissions of HCl measured using Method 26 or 26A, as applicable over the period of the performance test, are reduced by 92 percent or to a concentration less than or equal to 30 ppmv (dry basis) corrected to 3 percent oxygen. |
| 2. Each existing cyclic or continuous catalytic reforming unit and each new semi-regenerative, cyclic, or continuous catalytic reforming unit. | Reduce uncontrolled emissions of HCl by 97 percent by weight using a control device, or to a concentration of 10 ppmv (dry basis), corrected to 3 percent oxygen. | Average emissions of HCl measured using Method 26 or 26A, as applicable over the period of the performance test, are reduced by 97 percent or to a concentration less than or equal to 10 ppmv (dry basis) corrected to 3 percent oxygen. |

**TABLE 27 TO Subpart UUU OF PART 63.**—CONTINUOUS COMPLIANCE WITH INORGANIC HAP EMISSION LIMITS FOR CATALYTIC REFORMING UNITS

[As stated in § 63.1567(c)(1), you must meet each requirement in the following table that applies to you]

| For * * * | For this emission limit * * * | You must demonstrate continuous compliance during coke burn-off and catalyst rejuvenation by * * * |
|---|---|---|
| 1. Each existing semi-regenerative catalytic reforming unit. | Reduce uncontrolled emissions of HCl by 92 percent by weight using a control device or to a concentration of 30 ppmv (dry basis), corrected to 3 percent oxygen. | Maintaining a 92 percent HCl emission reduction or an HCl concentration no more than 30 ppmv (dry basis), corrected to 3 percent oxygen. |
| 2. Each existing cyclic or continuous catalytic reforming unit. | Reduce uncontrolled emissions of HCl by 97 percent by weight using a control device, or to a concentration of 10 ppmv (dry basis), corrected to 3 percent oxygen. | Maintaining a 97 percent HCl control efficiency or an HCl concentration no more than 10 ppmv (dry basis), corrected to 3 percent oxygen. |
| 3. Each new semi-regenerative, cyclic, or continuous catalytic reforming unit. | Reduce uncontrolled emissions of HCl by 97 percent by weight using a control device, or to a concentration of 10 ppmv (dry basis), corrected to 3 percent oxygen. | Maintaining a 97 percent HCl control efficiency or an HCl concentration no more than 10 ppmv (dry basis), corrected to 3 percent oxygen. |

**TABLE 28 TO Subpart UUU OF PART 63.**—CONTINUOUS COMPLIANCE WITH OPERATING LIMITS FOR INORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS

[As stated in § 63.1567(c)(1), you must meet each requirement in the following table that applies to you]

| For * * * | For this operating limit * * * | If you use this type of control device * * * | You must demonstrate continuous compliance during coke burn-off and catalyst rejuvenation by * * * |
|---|---|---|---|
| 1. Each new or existing catalytic reforming unit. | a. The daily average pH of the water (or scrubbing and liquid) exiting the scrubber must not fall below the level established during the performance test. | i. Wet scrubber ..... | (1) Collecting the hourly and daily average pH monitoring data according to § 63.1572; and maintaining the daily average the pH above the operating limit established during the performance test.<br><br>(2) If you use the alternative in § 63.1573, measuring and recording the pH of the water (or scrubbing liquid) exiting the scrubber every hour according to § 63.1572; determining and recording the daily average pH; and maintaining the daily average pH above the operating limit established during the performance test. |
| | b. The daily average liquid-to-gas ratio must not fall below the level established during the performance test. | Wet scrubber ..... | Collecting the hourly average gas flow rate and total water (or scrubbing liquid) flow rate monitoring data; determining and recording the hourly average liquid-to-gas ratio; determining and recording the daily average liquid-to-gas ratio; and maintaining the daily average liquidto-gas ratio above the limit established during the performance test. |
| | c. The HCl concentration in the catalyst regenerator exhaust gas must not exceed the applicable operating limit established during the performance test. | Internal scrubbing system (e.g., no add-on control device). | Measuring and recording the concentration of HCl every 4 hours using a colormetric tube sampling system; and maintaining the HCl concentration below the applicable operating limit. |

### TABLE 36 TO Subpart UUU OF PART 63.—WORK PRACTICE STANDARDS FOR HAP EMISSIONS FROM BYPASS LINES

[As stated in § 63.1569(a)(1), you must meet each work practice standard in the following table that applies to you]

| Option | You must meet one of these equipment standards * * * |
|---|---|
| 1. Option 1 ..... | Install and operate a device (including a flow indicator, level recorder, or electronic valve position monitor) to continuously detect, at least every hour, whether flow is present in the bypass line. Install the device at or as near as practical to the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere. |
| 2. Option 2 ..... | Install a car-seal or lock-and-key device placed on the mechanism by which the bypass device flow position is controlled (e.g., valve handle, damper level) when the bypass device is in the closed position such that the bypass line valve cannot be opened without breaking the seal or removing the device. |
| 3. Option 3 ..... | |
| 4. Option 4 ..... | Seal the bypass line by installing a solid blind between piping flanges. |
| | Vent the bypass line to a control device that meets the appropriate requirements in this subpart. |

### TABLE 37 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS FOR BYPASS LINES

[As stated in § 63.1569(b)(1), you must meet each requirement in the following table that applies to you]

| For this standard . . . | You must . . . |
|---|---|
| 1. Option 1: Install and operate a flow indicator, level recorder, or electronic valve position monitor. | Record during the performance test for each type of control device whether the flow indicator, level recorder, or electronic valve position monitor was operating and whether flow was detected at any time during each hour of level the three runs comprising the performance test. |

### TABLE 38 TO Subpart UUU OF PART 63.—INITIAL COMPLIANCE WITH WORK PRACTICE STANDARDS FOR HAP EMISSIONS FROM BYPASS LINES

[As stated in § 63.1569(b)(2), you must meet each requirement in the following table that applies to you]

| For * * * | For this work practice standard * * * | You have demonstrated initial compliance if * * * |
|---|---|---|
| 1. Each new or existing bypass line associated with a catalytic cracking unit, catalylic reforming unit, or sulfur recovery unit. | a. Option 1: Install and operate a device (including a flow indicator, level recorder, or electronic valve position monitor) to continuously detect, at least every hour, whether flow is present in the bypass line. Install the device at or as near as practical to the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere. | The installed equipment operates properly during each run of the performance test and no flow is present in the line during the test. |
| | b. Option 2: Install a car-seal or lock-and-key device placed on the mechanism by which the bypass device flow position is controlled (e.g., valve handle, damper level) when the bypass device is in the closed position such that the bypass line valve cannot be opened without breaking the seal or removing the device. | As part of the notification of compliance status, you certify that you installed the equipment, the equipment was operational by your compliance date, and you identify what equipment was installed. |
| | c. Option 3: Seal the bypass line by installing a solid blind between piping flanges. | See item 1.b. of this table. |
| | d. Option 4: Vent the bypass line to a control device that meets the appropriate requirements | See item 1.b. of this table. |

| | | |
|---|---|---|
| | in this subpart. | |

**TABLE 39 TO Subpart UUU OF PART 63.**—CONTINUOUS COMPLIANCE WITH WORK PRACTICE STANDARDS FOR HAP EMISSIONS FROM BYPASS LINES

[As stated in § 63.1569(c)(1), you must meet each requirement in the following table that applies to you]

| If you elect this standard * * * | You must demonstrate continuous compliance by * * * |
|---|---|
| 1. Option 1: Flow indicator, level recorder, or electronic valve position monitor. | Continuously monitoring and recording whether flow is present in the bypass line; visually inspecting the device at least once every hour if the device is not equipped with a recording system that provides a continuous record; and recording whether the device is operating properly and whether flow is present in the bypass line. |
| 2. Option 2: Car-seal or lock-and-key device ..... | Visually inspecting the seal or closure mechanism at least once every month; and recording whether the bypass line valve is maintained in the closed position and whether flow is present in the line. |
| 3. Option 3: Solid blind flange ..... | Visually inspecting the blind at least once a month; and recording whether the blind is maintained in the correct position such that the vent stream cannot be diverted through the bypass line. |
| 4. Option 4: Vent to control device ..... | Monitoring the control device according to appropriate subpart requirements. |
| 5. Option 1, 2, 3, or 4 ..... | Recording and reporting the time and duration of any bypass. |

**TABLE 41 TO Subpart UUU OF PART 63**.—REQUIREMENTS FOR INSTALLATION, OPERATION, AND MAINTENANCE OF CONTINUOUS PARAMETER MONITORING SYSTEMS—Continued

[As stated in § 63.1572(c)(1), you must meet each requirement in the following table that applies to you]

| If you use a continuous parameter monitoring system to measure and record * * * | You must * * * |
|---|---|
| 1. Voltage and secondary current or total power input. | At least monthly, inspect all components of the continuous parameter monitoring system for integrity and all electrical connections for continuity; and record the results of each inspection. |
| 2. Pressure drop [1] ..... | Locate the pressure sensor(s) in a position that provides a representative measurement of the pressure; minimize or eliminate pulsating pressure, vibration, and internal and external corrosion; use a gauge with an accuracy ± 2 percent over the operating range; check pressure tap for plugs at least once a week; using a manometer, check gauge calibration quarterly and transducer calibration monthly; for a semi-regenerative catalytic reforming unit, you can check the calibration quarterly and monthly or prior to regeneration, whichever is longer; record the results of each calibration; conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range, or install a new pressure sensor; at least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage; and record the results of each inspection. |
| 3. Air flow rate, gas flow rate, or total water (or scrubbing liquid) flow rate. | Locate the flow sensor(s) and other necessary equipment such as straightening vanes in a position that provides representative flow; use a flow rate sensor with an accuracy within ±5 percent; reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances; conduct a flow sensor calibration check at least semiannually; for a semi-regenerative catalytic reforming unit, you can check the calibration at least semiannually or prior to regeneration, whichever is longer; record the results of each calibration; if you elect to comply with Option 3 (Ni lb/hr) or Option 4 (Ni lb/1,000 lbs of coke burn-off) for the HAP metal emission limitations in § 63.1564, install the continuous parameter monitoring system for gas flow rate as close as practical to the continuous opacity monitoring system; and if you don't use a continuous opacity monitoring system, install the continuous parameter monitoring system for gas flow rate as close as practical to the control device. |
| 4. Combustion zone temperature ..... | Install the temperature sensor in the combustion zone or in the ductwork immediately downstream of the combustion zone before any substantial heat exchange occurs; locate the temperature sensor in a position that provides a representative temperature; use a temperature sensor with an accuracy of ±1 percent of the temperature being measured, expressed in degrees Celsius (C) or ±0.5 degrees C, whichever is greater; shield the temperature sensor system from electromagnetic interference and chemical contaminants; if you use a chart recorder, it must have a sensitivity in the minor division of at least 20 degrees Fahrenheit; perform an electronic calibration at least semiannually according to the procedures in the manufacturer's owners manual; following the electronic calibration, conduct a temperature sensor validation check, in which a second or redundant temperature sensor placed nearby the process temperature sensor must yield a reading within 16.7 degrees C of the process temperature sensor's reading; record the results of each calibration and validation check; conduct calibration and validation checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range, or install a new temperature sensor; and at least monthly, inspect all components for integrity and all electrical connections for continuity, oxidation, and galvanic corrosion. |
| 5. pH ..... | Locate the pH sensor in a position that provides a representative measurement of pH; ensure the sample is properly mixed and representative of the fluid to be measured; check the pH meter's calibration on at least two points every 8 hours of process operation; at least monthly, inspect all components for integrity and all electrical components for continuity; record the results of each inspection; and if you use pH strips to measure the pH of the water exiting a wet scrubber as an alternative to a continuous parameter monitoring system, you must use pH strips with an accuracy of ±10 percent. |
| 6. HCl concentration ..... | Use a colormetric tube sampling system with a printed numerical scale in ppmv, a standard measurement range of 1 to 10 ppmv (or 1 to 30 ppmv if applicable), and a standard deviation for measured values of no more than ±15 percent. System must include a gas detection pump and hot air probe if needed for the measurement range. |

**TABLE 42 TO Subpart UUU OF PART 63.—ADDITIONAL** INFORMATION FOR INITIAL NOTIFICATION OF COMPLIANCE STATUS

[As stated in § 63.1574(d), you must meet each requirement in the following table that applies to you]

| For * * * | You must provide this additional information * * * |
|---|---|
| 1. Identification of affected sources and emission points. | Nature, size, design, method of operation, operating design capacity of each affected source; identify each emission point for each HAP; identify any affected source or vent associated with an affected source not subject to the requirements of Subpart UUU. |
| 2. Initial compliance ..... | Identification of each emission limitation you will meet for each affected source, including any option you select (i.e., NSPS, PM or Ni, flare, percent reduction, concentration, options for bypass lines); if applicable, certification that you have already conducted a performance test to demonstrate initial compliance with the NSPS for an affected source; certification that the vents meet the applicable emission limit and the continuous opacity or that the emission monitoring system meets the applicable performance specification; if applicable, certification that you have installed and verified the operational status of equipment by your compliance date for each bypass line that meets the requirements of Option 2, 3, or 4 in § 63.1569 and what equipment you installed; identification of the operating limit for each affected source, including supporting documentation; if your affected source is subject to the NSPS, certification of compliance with NSPS emission limitations and performance specifications; a brief description of performance test conditions (capacity, feed quality, catalyst, etc.); an engineering assessment (if applicable); and if applicable, the flare design (e.g., steam-assisted, air-assisted, or non-assisted), all visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the Method 22 test. |
| 3. Continuous compliance ..... | Each monitoring option you elect; and identification of any unit or vent for which monitoring is not required; and the definition of ''operating day.'' (This definition, subject to approval by the applicable permitting authority, must specify the times at which a 24-hr operating day begins and ends.) |

**TABLE 43 TO Subpart UUU OF PART 63.**—REQUIREMENTS FOR REPORTS

[As stated in § 63.1575(a), you must meet each requirement in the following table that applies to you]

| You must submit a(n) * * * | The report must contain * * * | You must submit the report * * * |
|---|---|---|
| 1. Compliance report ..... | If there are not deviations from any emission limitation or work practice standard that applies to you, a statement that there were no deviations from the standards during the reporting period and that no continuous opacity monitoring system or continuous emission monitoring system was inoperative, inactive, out-of-control, repaired, or adjusted; and if you have a deviation from any emission limitation or work practice standard during the reporting period, the report must contain the information in § 63.1575(d) or (e) | Semiannually according to the requirements in § 63.1575(b). |

**Table 44 to Subpart UUU of Part 63 -** Applicability of NESHAP General Provisions to Subpart UUU
As stated in §63.1577, you must meet each requirement in the following table that applies to you.

| Citation | Subject | Applies to Subpart UUU | Explanation |
|---|---|---|---|
| §63.1 | Applicability | Yes | Except that Subpart UUU specifies calendar or operating day. |
| §63.2 | Definitions | Yes | |
| §63.3 | Units and Abbreviations | Yes | |
| §63.4 | Prohibited Activities | Yes | |
| §63.5(a)-(c) | Construction and Reconstruction | Yes | In §63.5(b)(4), replace the reference to §63.9 with §63.9(b)(4) and (5). |
| §63.5(d)(1)(i) | Application for Approval of Construction or Reconstruction - General Application Requirements | Yes | Except, Subpart UUU specifies the application is submitted as soon as practicable before startup but no later than 90 days (rather than 60) after the promulgation date where construction or reconstruction had commenced and initial startup had not occurred before promulgation. |
| §63.5(d)(1)(ii) | | Yes | Except that emission estimates specified in §63.5(d)(1) (ii)(H) are not required. |
| §63.5(d)(1)(iii) | | No | Subpart UUU specifies submission of notification of compliance status. |
| §63.5(d)(2) | | No | |
| §63.5(d)(3) | | Yes | Except that §63.5(d)(3)(ii) does not apply. |
| §63.5(d)(4) | | Yes | |
| §63.5(e) | Approval of Construction or Reconstruction | Yes | |
| §63.5(f)(1) | Approval of Construction or Reconstruction Based on State Review | Yes | |
| §63.5(f)(2) | | Yes | Except that 60 days is changed to 90 days and cross-reference to §63.9(b)(2) does not apply. |
| §63.6(a) | Compliance with Standards and Maintenance - Applicability | Yes | |
| §63.6(b)(1)-(4) | Compliance Dates for New and Reconstructed Sources | Yes | |
| §63.6(b)(5) | | Yes | Except that Subpart UUU specifies different compliance dates for sources. |
| §63.6(b)(6) | [Reserved] | Not appli-cable | |

| | | | |
|---|---|---|---|
| §63.6(b)(7) | Compliance Dates for New and Reconstructed Area Sources That Become Major | Yes | |
| §63.6(c)(1)-(2) | Compliance Dates for Existing Sources | Yes | Except that Subpart UUU specifies different compliance dates for sources subject to Tier II gasoline sulfur control requirements. |
| §63.6(c)(3)-(4) | [Reserved] | Not appli-cable | |
| §63.6(c)(5) | Compliance Dates for Existing Area Sources That Become Major | Yes | |
| §63.6(d) | [Reserved] | Not appli-cable | |
| §63.6(e)(1)-(2) | Operation and Maintenance Requirements | Yes | |
| §63.6(e)(3)(i)-(iii) | Startup, Shutdown, and Malfunction Plan | Yes | |
| §63.6(e)(3)(iv) | | Yes | Except that reports of actions not consistent with plan are not required within 2 and 7 days of action but rather must be included in next periodic report. |
| §63.6(e)(3)(v)-(viii) | | Yes | The owner or operator is only required to keep the latest version of the plan. |
| §63.6(f)(1)-(2)(iii)(C) | Compliance with Emission Standards | Yes | |
| §63.6(f)(2)(iii)(D) | | No | |
| §63.6(f)(2)(iv)-(v) | | Yes | |
| §63.6(f)(3) | | Yes | |
| §63.6(g) | Alternative Standard | Yes | |
| §63.6(h) | Opacity/VE Standards | Yes | |
| §63.6(h)(2)(i) | Determining Compliance with Opacity/VE Standards | No | Subpart UUU specifies methods. |
| §63.6(h)(2)(ii) | [Reserved] | Not appli-cable | |
| §63.6(h)(2)(iii) | | Yes | |
| §63.6(h)(3) | [Reserved] | Not appli-cable | |
| §63.6(h)(4) | Notification of Opacity/VE Observation Date | Yes | Applies to Method 22 tests. |
| §63.6(h)(5) | Conducting Opacity/VE Observations | No | |
| §63.6(h)(6) | Records of Conditions During Opacity/VE Observations | Yes | Applies to Method 22 observations. |
| §63.6(h)(7)(i) | Report COM Monitoring Data from Performance Test | Yes | |

| | | | |
|---|---|---|---|
| §63.6(h)(7)(ii) | Using COM Instead of Method 9 | No | |
| §63.6(h)(7)(iii) | Averaging Time for COM during Performance Test | Yes | |
| §63.6(h)(7)(iv) | COM Requirements | Yes | |
| §63.6(h)(8) | Determining Compliance with Opacity/VE Standards | Yes | |
| §63.6(h)(9) | Adjusted Opacity Standard | Yes | |
| §63.6(i)(1)-(14) | Extension of Compliance | Yes | Not applicable to an affected source with Tier II compliance date. May be applicable to an affected source exempt from Tier II rule. |
| §63.6(i)(15) | [Reserved] | Not appli-cable | |
| §63.6(i)(16) | | Yes | |
| §63.6(j) | Presidential Compliance Exemption | Yes | |
| §63.7(a)(1) | Performance Test Requirements-Applicability | Yes | Except that Subpart UUU specifies the applicable test and demonstration procedures. |
| §63.7(a)(2) | Performance Test Dates | No | Test results must be submitted in the Notification of Compliance Status report due 150 days after the compliance date. |
| §63.7(a)(3) | Section 114 Authority | Yes | |
| §63.7(b) | Notifications | Yes | Except that Subpart UUU specifies notification at least 30 days prior to the scheduled test date rather than 60 days. |
| §63.7(c) | Quality Assurance Program/Site-Specific Test Plan | Yes | |
| §63.7(d) | Performance Test Facilities | Yes | |
| §63.7(e) | Conduct of Tests | Yes | |
| §63.7(f) | Alternative Test Method | Yes | |
| §63.7(g) | Data Analysis, Record Keeping, Reporting | Yes | Except performance test reports must be submitted with notification of compliance status due 150 days after the compliance date. |
| §63.7(h) | Waiver of Tests | Yes | |
| §63.8(a)(1) | Monitoring Requirements - Applicability | Yes | |
| §63.8(a)(2) | Performance Specifications | Yes | |
| §63.8(a)(3) | [Reserved] | Not appli-cable | |
| §63.8(a)(4) | Monitoring with Flares | Yes | |
| §63.8(b)(1) | Conduct of Monitoring | Yes | |

| | | | |
|---|---|---|---|
| §63.8(b)(2)-(3) | Multiple Effluents and Multiple Monitoring Systems | Yes | Subpart UUU specifies the required monitoring locations. |
| §63.8(c)(1) | Monitoring System Operation and Maintenance | Yes | |
| §63.8(c)(1)(i)-(ii) | Startup, Shutdown, and Malfunctions | Yes | Except that Subpart UUU specifies that reports are not required if actions are consistent with the SSM plan, unless requested by the permitting authority. If actions are not consistent, actions must be described in next compliance report. |
| §63.8(c)(1)(iii) | Compliance with Operation and Maintenance Requirements | Yes | |
| §63.8(c)(2)-(3) | Monitoring System Installation | Yes | Except that Subpart UUU specifies that for continuous parameter monitoring systems, operational status verification includes completion of manufacturer written specifications or installation operation, and calibration of the system or other written procedures that provide adequate assurance that the equipment will monitor accurately. |
| §63.8(c)(4) | Continuous Monitoring System Requirements | No | Subpart UUU specifies operational requirements. |
| §63.8(c)(4)(i)-(ii) | Continuous Monitoring System Requirements | Yes | Except that these requirements apply only to a continuous opacity monitoring system or a continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or $SO_2$ limits. |
| §63.8(c)(5) | COM Minimum Procedures | Yes | |
| §63.8(c)(6) | CMS Requirements | No | Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or $SO_2$ limits. |
| §63.8(c)(7)-(8) | CMS Requirements | Yes | |
| §63.8(d) | Quality Control Program | Yes | Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or $SO_2$ limits. |

| | | | |
|---|---|---|---|
| §63.8(e) | CMS Performance Evaluation | Yes | Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or $SO_2$ limits. Results are to be submitted as part of the Notification of Compliance Status due 150 days after the compliance date. |
| §63.8(f)(1)-(5) | Alternative Monitoring Method | Yes | Except that Subpart UUU specifies procedures for requesting alternative monitoring systems and alternative parameters. |
| §63.8(f)(6) | Alternative to Relative Accuracy Test | Yes | Applicable to continuous emission monitoring systems if performance specification requires a relative accuracy test audit. |
| §63.8(g)(1)-(4) | Reduction of Monitoring Data | Yes | Applies to a continuous opacity monitoring system or continuous emission monitoring system. |
| §63.8(g)(5) | Data Reduction | No | Subpart UUU specifies requirements. |
| §63.9(a) | Notification Requirements - Applicability | Yes | Duplicate Notification of Compliance Status report to the Regional Administrator may be required. |
| §63.9(b)(1)-(5) | Initial Notifications | Yes | Except that notification of construction or reconstruction is to be submitted as soon as practicable before startup but no later than 30 days (rather than 60 days) after the effective date if construction or reconstruction had commenced but startup had not occurred before the effective date. |
| §63.9(c) | Request for Extension of Compliance | Yes | |
| §63.9(d) | New Source Notification for Special Compliance Requirements | Yes | |
| §63.9(e) | Notification of Performance Test | Yes | Except that notification is required at least 30 days before test. |
| §63.9(f) | Notification of VE/Opacity Test | Yes | |
| §63.9(g) | Additional Notification Requirements for Sources with Continuous Monitoring Systems | Yes | Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or $SO_2$ limits. |
| §63.9(h) | Notification of Compliance Status | Yes | Except that Subpart UUU specifies the notification is due no later than 150 days after compliance date. |
| §63.9(i) | Adjustment of Deadlines | Yes | |

| | | | |
|---|---|---|---|
| §63.9(j) | Change in Previous Information | Yes | |
| §63.10(a) | Record Keeping and Reporting-Applicability | Yes | |
| §63.10(b) | Records | Yes | Except that §63.10(b)(2)(xiii) applies if you use a continuous emission monitoring system to meet the NSPS or you elect to meet the NSPS, CO, or $SO_2$ reduced sulfur limit and the performance evaluation requires a relative accuracy test audit. |
| §63.10(c)(1)-(6), (9)-(15) | Additional Records for Continuous Monitoring Systems | Yes | Except that these requirements apply if you use a continuous opacity monitoring system or a continuous emission monitoring system to meet the NSPS or elect to meet the NSPS opacity, CO, or $SO_2$ limits. |
| §63.10(c)(7)-(8) | Records of Excess Emissions and Exceedances | No | Subpart UUU specifies requirements. |
| §63.10(d)(1) | General Reporting Requirements | Yes | |
| §63.10(d)(2) | Performance Test Results | No | Subpart UUU requires performance test results to be reported as part of the Notification of Compliance Status due 150 days after the compliance date. |
| §63.10(d)(3) | Opacity or VE Observations | Yes | |
| §63.10(d)(4) | Progress Reports | Yes | |
| §63.10(d)(5)(i) | Startup, Shutdown, and Malfunction Reports | Yes | Except that reports are not required if actions are consistent with the SSM plan, unless requested by permitting authority. |
| §63.10(d)(5)(ii) | | Yes | Except that actions taken during a startup, shut- down, or malfunction that are not consistent with the plan do not need to be reported within 2 and 7 days of commencing and completing the action, respectively, but must be included in the next periodic report. |
| §63.10(e)(1)-(2) | Additional CMS Reports | Yes | Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or $SO_2$ limits. Reports of performance evaluations must be submitted in Notification of Compliance Status. |
| §63.10(e)(3) | Excess Emissions/CMS Performance Reports | No | Subpart UUU specifies the applicable requirements. |
| §63.10(e)(4) | COMS Data Reports | Yes | |

| | | | |
|---|---|---|---|
| §63.10(f) | Record Keeping/ Reporting Waiver | Yes | |
| §63.11 | Control Device Requirements | Yes | Applicable to flares. |
| §63.13 | Addresses | Yes | |
| §63.14 | Incorporation by Reference | Yes | |
| §63.15 | Availability of Information | Yes | |

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| P021 -Alkyl 1/Alkylation Unit with blowdown emissions controlled by the West Flare | OAC rule 3745-21-09(T) | See section A.I.2.a. |
| | OAC rule 3745-21-09(UU)(2) | See sections A.I.2.e and A.I.2.f. |
| | 40 CFR Part 63, Subpart A | See sections A.I.2.b and A.I.2.c. |
| | 40 CFR Part 63, Subpart CC<br>40 CFR 63.648 | See sections A.I.2.c and A.I.2.d. |
| | miscellaneous process vents<br>40 CFR Part 63, Subpart CC | See section A.I.2.g. |

**2. Additional Terms and Conditions**

2.a Refer to Part II of this permit for the state requirements for equipment leaks found in sections A.I.2., A.II., A.III., A.IV. and A.V., referencing OAC rule 3745-21-09(T).

2.b 40 CFR Part 63, Subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 63.

2.c Table 6 of 40 CFR Part 63, Subpart CC specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.d Refer to Part II of this permit for the applicable equipment leak provisions found in sections A.I.2., A.II., A.III., A.IV. and A.V., referencing 40 CFR Part 60, Subpart VV.

2.e The Alkyl 1 blowdown drum shall be vented to a flare that complies with the requirements of OAC rule 3745-21-09(DD)(10)(d).

2.f Refer to Part II of this permit for the applicable monitoring, record keeping, reporting and testing requirements for refinery flares found in sections A.I., A.II., A.III., A.IV. and A.V.

2.g Refer to Part II of this permit for the miscellaneous process vent provisions found in sections A.I.2., A.II., A.III., A.IV. and A.V., referencing 40 CFR Part 63, Subpart CC.

## II. Operational Restrictions

1. See the applicable sections in Part II for equipment leaks in A.II., referencing 40 CFR Part 60, Subpart VV. and OAC rule 3745-21-09(T).

2. See the applicable sections in Part II for miscellaneous process vents in A.II., referencing 40 CFR Part 63, Subpart CC.

## III. Monitoring and/or Record Keeping Requirements

1. See the applicable sections in Part II for equipment leaks in A.III., referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. See the applicable sections in Part II for miscellaneous process vents in A.III., referencing 40 CFR Part 63, Subpart CC.

3. The permittee shall collect and record the following information each day: the operating times for the capture (collection) system, control device, and the associated emissions unit.

## IV. Reporting Requirements

1. See the applicable sections in Part II for equipment leaks in A.IV., referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. See the applicable sections in Part II for miscellaneous process vents in A.II., referencing 40 CFR Part 63, Subpart CC.

3. The permittee shall submit semi-annual deviation (excursion) reports of any periods in which the capture (collection) system and/or control device was not in operation while the emissions unit was in operation.

   If no deviations occurred during the 6-month period, then the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

   These reports shall be submitted semi-annually i.e., by January 30 and July 30 of each year, and shall cover the previous 6 calendar months.

## V. Testing Requirements

1. See the applicable sections in Part II for equipment leaks in A.V., referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. See the applicable sections in Part II for miscellaneous process vents in A.II., referencing 40 CFR Part 63, Subpart CC.

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| P022 -Alkyl 2/Alkylation Unit with blowdown emissions controlled by the West Flare | OAC rule 3745-21-09(T) | See section A.I.2.a. |
| | OAC rule 3745-21-09(UU)(2) | See section A.I.2.e and A.I.2.f. |
| | 40 CFR Part 63, Subpart A | See sections A.I.2.b and A.I.2.c. |
| | 40 CFR Part 63, Subpart CC<br>40 CFR 63.648 | See sections A.I.2.c and A.I.2.d. |
| | miscellaneous process vents<br>40 CFR Part 63, Subpart CC | See section A.I.2.g. |

**2. Additional Terms and Conditions**

2.a Refer to Part II of this permit for the state requirements for equipment leaks found in sections A.I.2., A.II., A.III., A.IV. and A.V., referencing OAC rule 3745-21-09(T).

2.b 40 CFR Part 63, Subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 63.

2.c Table 6 of 40 CFR Part 63, Subpart CC specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.d Refer to Part II of this permit for the applicable equipment leak provisions found in sections A.I.2., A.II., A.III., A.IV. and A.V., referencing 40 CFR Part 60, Subpart VV.

2.e The Alkyl 2 blowdown drum shall be vented to a flare that complies with the requirements of OAC rule 3745-21-09(DD)(10)(d).

2.f Refer to Part II of this permit for the applicable monitoring, record keeping, reporting and testing requirements for refinery flares found in sections A.I., A.II., A.III., A.IV. and A.V.

2.g Refer to Part II of this permit for the miscellaneous process vent provisions found in sections A.I.2., A.II., A.III., A.IV. and A.V., referencing 40 CFR Part 63, Subpart CC.

## II. Operational Restrictions

1. See the applicable sections in Part II for equipment leaks in A.II., referencing 40 CFR Part 60, Subpart VV. and OAC rule 3745-21-09(T).

2. See the applicable sections in Part II for miscellaneous process vents in A.II., referencing 40 CFR Part 63, Subpart CC.

## III. Monitoring and/or Record Keeping Requirements

1. See the applicable sections in Part II for equipment leaks in A.III., referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. See the applicable sections in Part II for miscellaneous process vents in A.III., referencing 40 CFR Part 63, Subpart CC.

## IV. Reporting Requirements

1. See the applicable sections in Part II for equipment leaks in A.IV., referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. See the applicable sections in Part II for miscellaneous process vents in A.II., referencing 40 CFR Part 63, Subpart CC.

## V. Testing Requirements

1. See the applicable sections in Part II for equipment leaks in A.V., referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. See the applicable sections in Part II for miscellaneous process vents in A.II., referencing 40 CFR Part 63, Subpart CC.

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| P023 -Alky 3 /Alkylation Unit vented to the Alkyl 2 (P022) blowdown. Emissions from the Alkyl 2 blowdown are controlled by the West Flare. | OAC rule 3745-21-09(T) | See section A.I.2.a. |
| | OAC rule 3745-21-09(UU)(2) | See sections A.I.2.e and A.I.2.f. |
| | 40 CFR Part 63, Subpart A | See sections A.I.2.b and A.I.2.c. |
| | 40 CFR Part 63, Subpart CC<br>40 CFR 63.648 | See sections A.I.2.c and A.I.2.d. |
| | miscellaneous process vents<br>40 CFR Part 63, Subpart CC | See section A.I.2.g. |

**2. Additional Terms and Conditions**

2.a Refer to Part II of this permit for the state requirements for equipment leaks found in sections A.I.2., A.II., A.III., A.IV. and A.V., referencing OAC rule 3745-21-09(T).

2.b 40 CFR Part 63, Subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 63.

2.c Table 6 of 40 CFR Part 63, Subpart CC specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.d Refer to Part II of this permit for the applicable equipment leak provisions found in sections A.I.2., A.II., A.III., A.IV. and A.V., referencing 40 CFR Part 60, Subpart VV.

2.e The Alkyl 2 blowdown drum shall be vented to a flare that complies with the requirements of OAC rule 3745-21-09(DD)(10)(d).

2.f Refer to Part II of this permit for the applicable monitoring, record keeping, reporting and testing requirements for refinery flares found in sections A.I., A.II., A.III., A.IV. and A.V.

2.g Refer to Part II of this permit for the miscellaneous process vent provisions found in sections A.I.2., A.II., A.III., A.IV. and A.V., referencing 40 CFR Part 63, Subpart CC.

## II. Operational Restrictions

1. See the applicable sections in Part II for equipment leaks in A.II., referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. See the applicable sections in Part II for miscellaneous process vents in A.II., referencing 40 CFR Part 63, Subpart CC.

## III. Monitoring and/or Record Keeping Requirements

1. See the applicable sections in Part II for equipment leaks in A.III., referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. See the applicable sections in Part II for miscellaneous process vents in A.III., referencing 40 CFR Part 63, Subpart CC.

## IV. Reporting Requirements

1. See the applicable sections in Part II for equipment leaks in A.IV., referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. See the applicable sections in Part II for miscellaneous process vents in A.II., referencing 40 CFR Part 63, Subpart CC.

## V. Testing Requirements

1. See the applicable sections in Part II for equipment leaks in A.V., referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. See the applicable sections in Part II for miscellaneous process vents in A.II., referencing 40 CFR Part 63, Subpart CC.

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

Emissions Unit ID: **P025**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| P025 - wastewater and stormwater streams within the refinery and refinery wastewater treatment system with the following control equipment: carbon canisters and benzene stripper vented to the west flare | OAC rule 3745-21-09(M)(2) | See section A.I.2.a. |
| | OAC rule 3745-21-09(UU)(4) | See section A.I.2g. |
| | 40 CFR Part 60, Subpart A | See section A.I.2.i. |
| | 40 CFR Part 61, Subpart A | See section A.I.2.k. |
| | 40 CFR Part 60, Subpart QQQ | See sections A.I.2.c and A.I.2.h. |
| | 40 CFR Part 63, Subpart CC<br>40 CFR 63.640(m) | See section A.I.2.b. |
| | 40 CFR 63.640 (o)(1) | See section A.I.2.c. |
| equipment leaks | 40 CFR Part 63, Subpart A<br>40 CFR 63.642(c) | See section A.I.2.d. |
| | 40 CFR Part 61, Subpart FF<br>40 CFR 61.342(a) and (c) | See section A.II.2. |
| | 40 CFR Part 63, Subpart CC | See sections A.I.2.d and A.I.2.e. |
| | OAC rule 3745-21-09(T) | See section A.I.2.f. |
| miscellaneous process vents | 40 CFR Part 63, Subpart CC | See section A.I.2.j. |

**2. Additional Terms and Conditions**

2.a Except for any wastewater separator which is used solely for once-through, noncontact cooling water or for intermittent tank farm drainage resulting from accumulated precipitation, the permittee shall control the emissions of VOC from any wastewater separator by equipping all forebay sections and other separator sections with covers and seals which minimize the amount of oily water exposed to the ambient air. In addition, all covers and forebay and separator sections shall be equipped with the lids and seals which are kept in a closed position at all times except when in actual use.

2.b [63.640(m) and definitions from 63.641]
If a change that does not meet the criteria in 40 CFR 63.640(l) of Subpart CC [see Part II A.I.2] is made to a petroleum refining process unit subject to this subpart, and the change causes a Group 2 emission point to become a Group 1 emission point (as defined in 40 CFR 63.641), then the permittee shall comply with the requirements for existing sources for the Group 1 emission point as expeditiously as practicable, but in no event later than 3 years after the emission point becomes Group 1.

i. [63.640(m)(1)]
The permittee shall submit to the Administrator for approval a compliance schedule, along with a justification for the schedule.

ii. [63.640(m)(2)]
The compliance schedule shall be submitted within 180 days after the change is made, unless the compliance schedule has been previously submitted to the permitting authority. If it is not possible to determine until after the change is implemented whether the emission point has become Group 1, the compliance schedule shall be submitted within 180 days of the date when the affect of the change is known to the source. The compliance schedule may be submitted in the next Periodic Report if the change is made after the date the Notification of Compliance Status report is due.

iii. [63.640(m)(3)]
The Administrator shall approve or deny the compliance schedule or request changes within 120 calendar days of receipt of the compliance schedule and justification. Approval is automatic if not received from the Administrator within 120 calendar days of receipt.

iv. [63.647(a)]
Except as provided in 40 CFR 63.647(b), the permittee of a Group 1 wastewater stream shall comply with the requirements of 40 CFR 61.340 through 61.355 of Subpart FF for each process wastewater stream that meets the definition in 40 CFR 63.641 [See section A.I.2.].

v. (a) [63.641]
A *Group 1 wastewater stream* means a wastewater stream at a petroleum refinery with a total annual benzene loading of 10 megagrams (Mg) per year or greater as calculated according to the procedures in 40 CFR 61.342 of Subpart FF that has a flow rate of 0.02 liters per minute or greater, a

benzene concentration of 10 parts per million by weight or greater, and is not exempt from control requirements under the provisions of 40 CFR Part 61, Subpart FF.

(b) *A Group 2 wastewater stream* means a wastewater stream that does not meet the definition of Group 1 wastewater stream.

2.c [63.640(o)]
Overlap of Subpart CC with other regulations for wastewater.

i. [63.640(o)(1)]
A Group 1 wastewater stream managed in a piece of equipment that is also subject to the provisions of 40 CFR Part 60, Subpart QQQ, is required to comply only with 40 CFR Part 63, Subpart CC.

ii. [63.640(o)(2)]
A Group 1 or Group 2 wastewater stream that is conveyed, stored, or treated in a wastewater stream management unit that also receives streams subject to the provisions of 40 CFR 63.133 through 63.147 of Subpart G wastewater provisions shall comply as specified in 63.640(o)(2)(i) or (o)(2)(ii). Compliance with the provisions of this paragraph shall constitute compliance with the requirements of 40 CFR Part 63, Subpart CC for that wastewater stream.

(a) [63.640(o)(2)(i)]
Comply with 63.640(o)(2)(i)(A) through (o)(2)(i)(C).

(i) [63.640(o)(2)(i)(A)]
The provisions in 40 CFR 63.133 through 63.140 of Subpart G for all equipment used in the storage and conveyance of the Group 1 or Group 2 wastewater stream.

(ii) [63.640(o)(2)(i)(B)]
The provisions in both 40 CFR Part 61, Subpart FF and in 40 CFR 63.138 and 63.139 of Subpart G for the treatment and control of the Group 1 or Group 2 wastewater stream.

(iii) [63.640(o)(2)(i)(C)]
The provisions in 40 CFR 63.143 through 63.148 of Subpart G for monitoring and inspections of equipment and for record keeping and reporting requirements. The permittee is not required to comply with the monitoring, record keeping, and reporting requirements associated with the treatment and control requirements in 40 CFR 61.355 through 61.357.

(b) [63.640(o)(2)(ii)]
Comply with the 40 CFR 63.640(o)(2)(ii)(A) and (o)(2)(ii)(B).

(i) [63.640(o)(2)(ii)(A)]
Comply with the provisions of 40 CFR 63.133 through 63.148 and 63.151 and 63.152 of Subpart G.

(ii) [63.640(o)(2)(ii)(B)]
For any Group 2 wastewater stream or organic stream whose benzene emissions are subject to control through the use of one or more treatment processes or waste management units under the provisions of 40 CFR Part 61, Subpart FF on or after December 31, 1992, comply with the requirements of 40 CFR 63.133 through 63.147 of Subpart G for Group 1 wastewater streams.

2.d Table 6 of 40 CFR Part 63, Subpart CC, specifies the provisions of 40 CFR Part 63, Subpart A, that apply and those that do not apply to permittees of sources subject to Subpart CC.

2.e i. [63.648(a)]
The permittee shall comply with the provisions of 40 CFR Part 60, Subpart VV and 40 CFR 63.648(b) except as provided in paragraphs (a)(1), (a)(2), and (c) through (i) of 40 CFR 63.648 [see Part II section A.I].

ii. Refer to Part II of this permit for the applicable equipment leak provisions found in sections A.I.2., A.II., A.III., A.IV. and A.V., referencing 40 CFR Part 60, Subpart VV.

2.f Refer to Part II of this permit for the state requirements for equipment leaks found in sections A.I.2., A.II., A.III., A.IV. and A.V., referencing OAC rule 3745-21-09(T).

2.g All process wastewater from the crude desalter shall be discharged to a steam stripper for the recovery of condensable hydrocarbons, and all VOC emissions from the steam stripper shall be vented to a flare that complies with the requirements of OAC rule 3745-21-09(DD)(10)(d) [see Part II section A.II]. The monitoring, record keeping and reporting requirements for refinery flares complying with OAC rule 3745-21-09(DD)(10)(d) are contained in Part II Sections I through V of this permit.

2.h Group 2 wastewater streams that are managed in a piece of equipment subject to 40 CFR Part 60, Subpart QQQ, shall comply with the requirements of 40 CFR 60.692-1 to 60.692-5 and 40 CFR 60.693-1 and 60.693-2 [See section A.II], except during periods of startup, shutdown or malfunction.

2.i 40 CFR Part 60, Subpart A provides applicability provisions, definitions and other general provisions that are pertinent to emissions units subject to 40 CFR Part 60.

2.j Refer to Part II of this permit for the miscellaneous process vent provisions found in sections A.I.2., A.II., A.III., A.IV. and A.V., referencing 40 CFR Part 63, Subpart CC.

2.k 40 CFR Part 61, Subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 61.

## II. Operational Restrictions

1. 40 CFR Part 63, Subpart CC

a. [63.642(k)] GENERAL STANDARDS
The permittee of an existing source may comply, and the permittee of a new source shall comply with the wastewater provisions in 40 CFR 63.647 [See section A.II.].

i. [63.642(k)(1)]
The permittee using this compliance approach shall also comply with the requirements of 40 CFR 63.654 [See section A.IV.] as applicable.

ii. [63.642(k)(2)]
The permittee using this compliance approach is not required to calculate the annual emission rate specified in 40 CFR 63.642(g) of Subpart CC.

b. [63.647] WASTEWATER PROVISION

i. [63.647(b)]
As used in this section, all terms not defined in 40 CFR 63.641 shall have the meaning given them in the Clean Air Act or in 40 CFR 61.341, of Subpart FF.

ii. [63.647(c)]
Each permittee required under 40 CFR Part 61, Subpart FF to perform periodic measurement of benzene concentration in wastewater, or to monitor process or control device operating parameters shall operate in a manner consistent with the minimum or maximum (as appropriate) permitted concentration or operating parameter values. Operation of the process, treatment unit, or control device resulting in a measured concentration or operating parameter value outside the permitted limits shall constitute a violation of the emission standards. Failure to perform required leak monitoring for closed vent systems and control devices or failure to repair leaks within the time period specified in 40 CFR Part 61, Subpart FF, shall constitute a violation of the standard.

c. Miscellaneous Process Vents
See the applicable sections in Part II for miscellaneous process vents in A.II., referencing 40 CFR Part 63, Subpart CC.

2. 40 CFR Part 61, Subpart FF - National Emission Standard for Benzene Waste Operations

a. [61.340] Applicability

i. [61.340(c)]

The following waste is exempt from the requirements of 40 CFR Part 61, Subpart FF.

(a) Waste in the form of gases or vapors that is emitted from process fluids; and,
(b) Waste that is contained in a segregated stormwater sewer system.

ii. [61.340(d)]
Any gaseous stream from a waste management unit, treatment process, or wastewater treatment system routed to a fuel gas system, as defined in 40 CFR 61.341, is exempt from 40 CFR 61 Subpart FF. No testing, monitoring, record keeping, or reporting is required under 40 CFR Part 61, Subpart FF for any gaseous stream from a waste management unit, treatment process, or wastewater treatment unit routed to a fuel gas system.

b. [61.342] GENERAL STANDARDS

i. [61.342(a)]
The permittee shall be exempt from the requirements of 40 CFR 61.342(b) and (c) if the total annual benzene quantity from facility waste is less than 10 megagrams per year (Mg/yr)(11 tons/yr). The total annual benzene quantity from facility waste is the sum of the annual benzene quantity for each waste stream at the facility that has a flow-weighted annual average water content greater than 10 percent or that is mixed with water, or other wastes, at any time and the mixture has an annual average water content greater than 10 percent. The benzene quantity in a waste stream is to be counted only once without multiple counting if other waste streams are mixed with or generated from the original waste stream. Other specific requirements for calculating the total annual benzene waste quantity are as follows:

(a) [61.342(a)(1)]
Wastes that are exempted from control under 40 CFR 61.342(c)(2) and 61.342(c)(3) are included in the calculation of the total annual benzene quantity if they have an annual average water content greater than 10 percent, or if they are mixed with water or other wastes at any time and the mixture has an annual average water content greater than 10 percent.

(b) [61.342(a)(2)]
The benzene in a material subject to this subpart that is sold is included in the calculation of the total annual benzene quantity if the material has an annual average water content greater than 10 percent.

(c) [61.342(a)(3)]
Benzene in wastes generated by remediation activities conducted at the facility, such as the excavation of contaminated soil, pumping and treatment of groundwater, and the recovery of product from soil or groundwater, are not included in the calculation of total annual benzene

quantity for that facility. If the facility's total annual benzene quantity is 10 Mg/yr (11 ton/yr) or more, wastes generated by remediation activities are subject to the requirements of paragraphs 40 CFR 61.342(c) through (h) of Subpart FF [See section A.II.]. If the facility is managing remediation waste generated offsite, the benzene in this waste shall be included in the calculation of total annual benzene quantity in facility waste, if the waste streams have an annual average water content greater than 10 percent, or if they are mixed with water or other wastes at any time and the mixture has an annual average water content greater than 10 percent.

(d) [61.342(a)(4)]
The total annual benzene quantity is determined based upon the quantity of benzene in the waste before any waste treatment occurs to remove the benzene except as specified in 40 CFR 61.355(c)(1)(i)(A) through (C) [See section A.V.].

ii. [61.342(c)]
Each permittee of a facility at which the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr (11 ton/yr) as determined in 61.347(a) shall manage and treat the facility waste as follows:

(a) [61.342(c)(1)]
For each waste stream that contains benzene, including (but not limited to) organic waste streams that contain less than 10 percent water and aqueous waste streams, even if the wastes are not discharged to an individual drain system, the permittee shall:

(i) [61.342(c)(1)(i)]
Remove or destroy the benzene contained in the waste using a treatment process or wastewater treatment system that complies with the standards specified in 61.348 [See section A.II.].

(ii) [61.342(c)(1)(ii)]
Comply with the standards specified in 40 CFR 61.343 through 61.347 [See section A.II.] for each waste management unit that receives or manages the waste stream prior to and during treatment of the waste stream in accordance with 40 CFR 61.342(c)(1)(i).

(iii) [61.342(c)(1)(iii)]
Each waste management unit used to manage or treat waste streams that will be recycled to a process shall comply with the standards specified in 40 CFR 61.343 through 61.347 [See section A.II.]. Once the waste stream is recycled to a process, including to a tank used for the storage of production process feed, product, or product intermediates, unless this tank is used primarily for the storage of wastes, the material is no longer subject to 40 CFR 61.342(c).

(b) [61.342(c)(2)]
A waste stream is exempt from 40 CFR 61.342(c)(1) provided that the permittee demonstrates initially and, thereafter, at least once per year that the flow-weighted annual average benzene concentration for the waste stream is less than 10 ppmw as determined by the procedures specified in 40 CFR 61.355(c)(2) or 61.355(c)(3) [See section A.V.].

(c) [61.342(c)(3)]
A waste stream is exempt from 40 CFR 61.342(c)(1) provided that the permittee demonstrates initially and, thereafter, at least once per year that the conditions specified in either 40 CFR 61.342(c)(3)(i) or (c)(3)(ii) are met.

(i) [61.342(c)(3)(i)]
The waste stream is process wastewater that has a flow rate less than 0.02 liters per minute (0.005 gallons per minute) or an annual wastewater quantity of less than 10 Mg/yr (11 ton/yr); or

(ii) [61.342(c)(3)(ii)]
All of the following conditions are met:

(aa) [61.342(c)(3)(i)(A)]
The permittee does not choose to exempt process wastewater under 61.342(c)(3)(i);

(bb) [61.342(c)(3)(i)(B)]
The total annual benzene quantity in all waste streams chosen for exemption in 40 CFR 61.342(c)(3)(ii) does not exceed 2.0 Mg/yr (2.2 ton/yr) as determined in the procedures in 40 CFR 61.355(j) [See section A.V.]; and

(cc) [61.342(c)(3)(i)(C)]
The total annual benzene quantity in a waste stream chosen for exemption, including process unit turnaround waste, is determined for the year in which the waste is generated.

iii. [61.342(d)]
As an alternative to the requirements specified in paragraphs (c) and (e) of 40 CFR 61.342, the permittee of a facility at which the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr (11 ton/yr) as determined in paragraph (a) of 40 CFR 61.342 may elect to manage and treat the facility waste as follows:

(a) [61.342(d)(1)]
The permittee shall manage and treat facility waste other than process wastewater in accordance with the requirements of paragraph (c)(1) of 40 CFR 61.342.

(b) [61.342(d)(2)]
The permittee shall manage and treat process wastewater in accordance with the following requirements:

(i) [61.342(d)(2)(i)]
Process wastewater shall be treated to achieve a total annual benzene quantity from facility process wastewater less than 1 Mg/yr (1.1 ton/yr) Total annual benzene from facility process wastewater shall be determined by adding together the annual benzene quantity at the point of waste generation for each untreated process wastewater stream plus the annual benzene quantity exiting the treatment process for each process wastewater stream treated in accordance with the requirements of paragraph (c)(1)(i) of 40 CFR 61.342.

(ii) [61.342(d)(2)(ii)]
Each treated process wastewater stream identified in paragraph (d)(2)(i) of 40 CFR 61.342 shall be managed and treated in accordance with paragraph (c)(1) of 40 CFR 61.342.

(iii) [61.342(d)(2)(iii)]
Each untreated process wastewater stream identified in paragraph (d)(2)(i) of 40 CFR 61.342 is exempt from the requirements of paragraph (c)(1) of 40 CFR 61.342.

iv. [61.342(e)]
As an alternative to the requirements specified in paragraphs (c) and (d) of 40 CFR 61.342, the permittee of a facility at which the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr (11 ton/yr) as determined in paragraph (a) of 40 CFR 61.342 may elect to manage and treat the facility waste as follows:

(a) [61.342(e)(1)]
The permittee shall manage and treat facility waste with a flow-weighted annual average water content of less than 10 percent in accordance with the requirements of paragraph (c)(1) of 40 CFR 61.342; and

(b) [61.342(e)(2)]
The permittee shall manage and treat facility waste (including remediation and process unit turnaround waste) with a flow-weighted annual average water content of 10 percent or greater, on a volume basis as total water, and each waste stream that is mixed with water or wastes at any time such that the resulting mixture has an annual water content greater than 10 percent, in accordance with the following:

(i) [61.342(e)(2)(i)]

The benzene quantity for the wastes described in paragraph (e)(2) of 40 CFR 61.342 must be equal to or less than 6.0 Mg/yr (6.6 ton/yr), as determined in 40 CFR 61.355(k) [See section A.V]. Wastes as described in paragraph (e)(2) of 40 CFR 61.342 that are transferred offsite shall be included in the determination of benzene quantity as provided in 40 CFR 61.355(k) The provisions of paragraph (f) of 40 CFR 61.342 shall not apply to any permittee who elects to comply with the provisions of paragraph (e) of 40 CFR 61.342.

(ii) [61.342(e)(2)(ii)]
The determination of benzene quantity for each waste stream defined in paragraph (e)(2) of 40 CFR 61.342 shall be made in accordance with 40 CFR 61.355(k) [See section A.V].

v. [61.342(f)]
Rather than treating the waste onsite, the permittee may elect to comply with paragraph (c)(1)(i) of 40 CFR 61.342 by transferring the waste offsite to another facility where the waste is treated in accordance with the requirements of paragraph (c)(1)(i) of 40 CFR 61.342. The permittee transferring the waste shall:

(a) [61.342(f)(1)]
Comply with the standards specified in 40 CFR 61.343 through 61.347 of 40 CFR 61 for each waste management unit that receives or manages the waste prior to shipment of the waste offsite.

(b) [61.342(f)(2)]
Include with each offsite waste shipment a notice stating that the waste contains benzene which is required to be managed and treated in accordance with the provisions of 40 CFR Part 61, Subpart FF.

vi. [61.342(g)]
Compliance with 40 CFR Part 61, Subpart FF will be determined by review of facility records and results from tests and inspections using methods and procedures specified in 40 CFR 61.355 [See section A.V].

vii. [61.342(h)]
Permission to use an alternative means of compliance to meet the requirements of 40 CFR 61.342 through 61.352 may be granted by the Administrator of USEPA as provided in 40 CFR 61.353.

c. [61.343] STANDARDS: TANKS

i. [61.343(a)]
Except as provided in 40 CFR 61.343(b) and in 40 CFR 61.351 [See section A.II.], the permittee must meet the standards in paragraph (a)(1) and (a)(2) of 40 CFR 61.343 for each tank in which the waste stream is placed in accordance with

40 CFR 61.342(c)(1)(ii) [See section A.II.]. The standards in this section apply to the treatment and storage of the waste stream in a tank, including dewatering.

(a) [61.343(a)(1)]
The permittee shall install, operate, and maintain a fixed-roof and closed-vent system that routes all organic vapors vented from the tank to a control device.

(i) [61.343(a)(1)(i)]
The fixed-roof shall meet the following requirements:

(aa) [61.343(a)(1)(i)(A)
The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) shall be designed to operate with no detectable emissions as indicated by an instrument reading less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h) [See section A.V.].

(bb) [61.343(a)(1)(i)(B)]
Each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that waste is in the tank except when it is necessary to use the opening for waste sampling or removal, or for equipment inspection, maintenance, or repair.

(cc) [61.343(a)(1)(i)(C)]
If the cover and closed-vent system operate such that the tank is maintained at a pressure less than atmospheric pressure, then paragraph (a)(1)(i)(B) of 40 CFR 61.343 does not apply to any opening that meets all of the following conditions:

(aaa) [61.354(a)(1)(i)(C)(1)]
The purpose of the opening is to provide dilution air to reduce the explosion hazard;

(bbb) [61.354(a)(1)(i)(C)(2)]
The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h) [See section A.V.]; and

(ccc) [61.354(a)(1)(i)(C)(3)]

The pressure is monitored continuously to ensure that the pressure in the tank remains below atmospheric pressure.

(ii) [61.343(a)(1)(ii)]
The closed-vent system and control device shall be designed and operated in accordance with the requirement of 40 CFR 61.349 [See section A.III.].

(b) [61.343(a)(2)]
The permittee must install, operate and maintain an enclosure and closed-vent system that routes all organic vapors vented from the tank, located inside the enclosure, to an enclosed combustion control device in accordance with the requirements specified in 40 CFR 61.343(e).

ii. [61.343(b)]
For a tank that meets all the conditions specified in 40 CFR 61.343(b)(1), the permittee may elect to comply with 40 CFR 61.343(b)(2) as an alternative to the requirements specified in 40 CFR 61.343(a)(1).

(a) [61.343(b)(1)]
The waste managed in the tank complying with 40 CFR 61.343(b)(2) shall meet all of the following conditions:

(i) [61.343(b)(1)(i)]
Each waste stream managed in the tank must have a flow-weighted annual average water content less than or equal to 10 percent water, on a volume basis as total water.

(ii) [61.343(b)(1)(ii)]
The waste managed in the tank either has a maximum organic vapor pressure less than 5.2 kilopascals (kPa) (0.75 pounds per square inch (psi)); has a maximum organic vapor pressure less than 27.6 kPa (4.0 psi) and is managed in a tank having design capacity less than 151 $m^3$ (40,000 gal); or has a maximum organic vapor pressure less than 76.6 kPa (11.1 psi) and is managed in a tank having a design capacity less than 75 $m^3$ (20,000 gal).

(b) [61.343(b)(2)]
The permittee shall install, operate, and maintain a fixed roof as specified in 40 CFR 61.343(a)(1)(i).

(c) [61.343(b)(3)]
For each tank complying with 40 CFR 61.343(b), one or more devices which vent directly to the atmosphere may be used on the tank provided each device remains in a closed, sealed position during normal operations except when the device needs to open to prevent physical damage or

permanent deformation of the tank or cover resulting from filling or emptying the tank, diurnal temperature changes, atmospheric pressure changes or malfunction of the unit in accordance with good engineering and safety practices for handling flammable, explosive, or other hazardous materials.

iii. [61.343(e)]
If the permittee controls air pollutant emissions by using an enclosure vented through a closed-vent system to an enclosed combustion control device, then the permittee must meet the requirements specified in paragraphs (e)(1) through (4) of 40 CFR 61.343(e).

(a) [61.343(e)(1)]
The tank must be located inside a total enclosure. The enclosure must be designed and operated in accordance with the criteria for a permanent total enclosure as specified in "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure" in 40 CFR 52.741, Appendix B. The enclosure may have permanent or temporary openings to allow worker access; passage of material into or out of the enclosure by conveyor, vehicles, or other mechanical means; entry of permanent mechanical or electrical equipment; or direct airflow into the enclosure. The permittee must perform the verification procedure for the enclosure as specified in section 5.0 of Procedure T initially when the enclosure is first installed and, thereafter, annually. A facility that has conducted an initial compliance demonstration and that performs annual compliance demonstrations in accordance with the requirements for Tank Level 2 control requirements 40 CFR 264.1084(i) or 40 CFR 265(i)is not required to make repeat demonstrations of initial and continuous compliance for the purposes of this subpart.

(b) [61.343(e)(2)]
The enclosure must be vented through a closed-vent system to an enclosed combustion control device that is designed and operated in accordance with the standards for either a vapor incinerator, boiler, or process heater specified in 40 CFR 61.349.

(c) [61.343(e)(3)]
Safety devices, as defined in this subpart, may be installed and operated as necessary on any enclosure, closed-vent system, or control device used to comply with the requirements of paragraphs (e)(1) and (2) of this 40 CFR 61.343.

(d) [61.343(e)(4)]
The closed-vent system must be designed and operated in accordance with the requirements of 40 CFR 61.349.

d. [61.344] STANDARDS: SURFACE IMPOUNDMENTS

i. [61.344(a)]
The permittee shall meet the following standards for each surface impoundment in which waste is placed in accordance with 40 CFR 61.342(c)(1)(ii) [See section A.II]:

(a) [61.344(a)(1)]
The permittee shall install, operate, and maintain on each surface impoundment a cover (e.g., air-supported structure or rigid cover) and closed-vent system that routes all organic vapors vented from the surface impoundment to a control device.

(i) [61.344(a)(1)(i)]
The cover shall meet the following requirements:

(aa) [61.344(a)(1)(i)(A)]
The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h)[See section A.V].

(bb) [61.344(a)(1)(i)(B)]
Each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that waste is in the surface impoundment except when it is necessary to use the opening for waste sampling or removal, or for equipment inspection, maintenance, or repair.

(cc) [61.344(a)(1)(i)(C)]
If the cover and closed-vent system operate such that the enclosure of the surface impoundment is maintained at a pressure less than atmospheric pressure, then paragraph (a)(1)(i)(B) of 40 CFR 61.344 does not apply to any opening that meets all of the following conditions:

(aaa) [61.344(a)(1)(i)(C)(1)]
The purpose of the opening is to provide dilution air to reduce the explosion hazard;

(bbb) [61.344(a)(1)(i)(C)(2)]
The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per

year by the methods specified in 40 CFR 61.355(h)[See section A.V]; and

(ccc) [61.344(a)(1)(i)(C)(3)]
The pressure is monitored continuously to ensure that the pressure in the enclosure of the surface impoundment remains below atmospheric pressure.

(dd) [61.344(a)(1)(i)(D)]
The cover shall be used at all times that waste is placed in the surface impoundment except during removal of treatment residuals in accordance with 40 CFR 268.4 or closure of the surface impoundment in accordance with 40 CFR 264.228. (Note: the treatment residuals generated by these activities may be subject to the requirements of 40 CFR Part 61, Subpart FF.).

(ii) [61.344(a)(1)(ii)]
The closed-vent system and control device shall be designed and operated in accordance with 40 CFR 61.349 [See section A.III].

e. [61.345(a)] STANDARDS: CONTAINERS
The permittee shall meet the following standards for each container in which waste is placed in accordance with 40 CFR 61.342(c)(1)(ii) [See section A.II.]:

i. [61.345(a)(1)]
The permittee shall install, operate, and maintain a cover on each container used to handle, transfer, or store waste in accordance with the following requirements:

(a) [61.345(a)(1)(i)]
The cover and all openings (e.g., bungs, hatches, and sampling ports) shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h) [See section A.V.].

(b) [61.345(a)(1)(ii)]
Except as provided in 40 CFR 61.345(a)(4), each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that waste is in the container except when it is necessary to use the opening for waste loading, removal, inspection, or sampling.

ii. [61.345(a)(2)]
When a waste is transferred into a container by pumping, the permittee shall perform the transfer using a submerged fill pipe. The submerged fill pipe outlet shall extend to within two fill pipe diameters of the bottom of the container while

the container is being loaded. During loading of the waste, the cover shall remain in place and all openings shall be maintained in a closed, sealed position except for those openings required for the submerged fill pipe, those openings required for venting of the container to prevent physical damage or permanent deformation of the container or cover, and any openings complying with 40 CFR 61.345(a)(4).

iii. [61.345(a)(3)]
Treatment of a waste in a container, including aeration, thermal or other treatment, shall be performed by the permittee in a manner such that while the waste is being treated the container meets the standards specified in paragraphs(a)(3)(i) through (iii) of 40 CFR 61.345, except for covers and closed-vent systems that meet the requirements in 40 CFR 61.345(a)(4).

(a) [61.345(a)(3)(i)]
The permittee must either:

(i) [61.345(a)(3)(i)(A)]
Vent the container inside a total enclosure which is exhausted through a closed-vent system to a control device in accordance with the requirements of paragraphs (a)(3)(ii)(A) and (B) of 40 CFR 61.345 [See section A.II]; or

(ii) [61.345(a)(3)(i)(B)]
Vent the covered or closed container directly through a closed-vent system to a control device in accordance with the requirements of paragraphs (a)(3)(ii)(B) and (C) of 40 CFR 61.345 [See section A.II].

(b) [61.345(a)(3)(ii)]
The permittee must meet the following requirements, as applicable to the type of air emission control equipment selected by the owner or operator:

(i) [61.345(a)(3)(ii)(A)]
The total enclosure must be designed and operated in accordance with the criteria for a permanent total enclosure as specified in section 5 of the "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure" in 40 CFR 52.741, Appendix B. The enclosure may have permanent or temporary openings to allow worker access; passage of containers through the enclosure by conveyor or other mechanical means; entry of permanent mechanical or electrical equipment; or direct airflow into the enclosure. The permittee must perform the verification procedure for the enclosure as specified in section 5.0 of "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure" initially when the enclosure is first installed and, thereafter, annually. A facility that has conducted an initial compliance demonstration and that performs annual

compliance demonstrations in accordance with the Container Level 3 control requirements in 40 CFR 264.1086(e)(2)(i) or 40 CFR 265.1086(e)(2)(i) is not required to make repeat demonstrations of initial and continuous compliance for the purposes of 40 CFR Part 61, Subpart FF.

(ii) [61.345(a)(3)(ii)(B)]
The closed-vent system and control device must be designed and operated in accordance with the requirements of 40 CFR 61.349 [See section A.II].

(iii) [61.345(a)(3)(ii)(C)]
For a container cover, the cover and all openings (e.g., doors, hatches) must be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h) [See section A.V].

(c) [61.345(a)(3)(iii)]
Safety devices, as defined in this subpart, may be installed and operated as necessary on any container, enclosure, closed-vent system, or control device used to comply with the requirements of 40 CFR 61.345(e)(1) [See section A.II].

iv. [61.345(a)(4)]
If the cover and closed-vent system operate such that the container is maintained at a pressure less than atmospheric pressure, the permittee may operate the system with an opening that is not sealed and kept closed at all times if the following conditions are met:

(a) [61.345(a)(4)(i)]
The purpose of the opening is to provide dilution air to reduce the explosion hazard;

(b) [61.345(a)(4)(ii)]
The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by methods specified in 40 CFR 61.355(h) [See section A.V.]; and

(c) [61.345(a)(4)(iii)]
The pressure is monitored continuously to ensure that the pressure in the container remains below atmospheric pressure.

f. [61.346] STANDARDS: INDIVIDUAL DRAIN SYSTEMS - 40 CFR Part 61, Subpart FF

i. [61.346(a)]
Except as provided in 40 CFR 61.346(b), the permittee shall meet the following standards for each individual drain system in which waste is placed in accordance with 40 CFR 61.342(c)(1)(ii) [See section A.II.]:

(a) [61.346(a)(1)]
The permittee shall install, operate, and maintain on each drain system opening a cover and closed-vent system that routes all organic vapors vented from the drain system to a control device.

(i) [61.346(a)(1)(i) and (a)(1)(i)(A) through (a)(1)(i)(C)]
The cover shall meet the following requirements:

(aa) The cover and all openings (e.g., access hatches, sampling ports) shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h) [See section A.V.].

(bb) Each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that waste is in the drain system except when it is necessary to use the opening for waste sampling or removal, or for equipment inspection, maintenance, or repair.

(cc) If the cover and closed-vent system operate such that the individual drain system is maintained at a pressure less than atmospheric pressure, then 40 CFR 61.346(a)(1)(i)(B) does not apply to any opening that meets all of the following conditions:

(aaa) The purpose of the opening is to provide dilution air to reduce the explosion hazard;

(bbb) The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 61.355(h) [See section A.V.]; and

(ccc) The pressure is monitored continuously to ensure that the pressure in the individual drain system remains below atmospheric pressure.

(ii) [61.346(a)(1)(ii)]

The closed-vent system and control device shall be designed and operated in accordance with 40 CFR 61.349 [See section A.III.].

ii. [61.346(b)]
As an alternative to complying with 40 CFR 61.346(a), the permittee may elect to comply with the following requirements:

(a) [61.346(b)(1)]
Each drain shall be equipped with water seal controls or a tightly sealed cap or plug.

(b) [61.346(b)(2)]
Each junction box shall be equipped with a cover and may have a vent pipe. The vent pipe shall be at least 90 cm (3 ft) in length and shall not exceed 10.2 cm (4 in) in diameter.

(i) [61.346(b)(2)(i)]
Junction box covers shall have a tight seal around the edge and shall be kept in place at all times, except during inspection and maintenance.

(ii) [61.346(b)(2)(ii)]
One of the following methods shall be used to control emissions from the junction box vent pipe to the atmosphere:

(aa) [61.346(b)(2)(ii)(A)]
Equip the junction box with a system to prevent the flow of organic vapors from the junction box vent pipe to the atmosphere during normal operation. An example of such a system includes use of water seal controls on the junction box. A flow indicator shall be installed, operated, and maintained on each junction box vent pipe to ensure that organic vapors are not vented from the junction box to the atmosphere during normal operation.

(bb) [61.346(b)(2)(ii)(B)]
Connect the junction box vent pipe to a closed-vent system and control device in accordance with 40 CFR 61.349.

(c) [CFR 61.346(b)(3)]
Each sewer line shall not be open to the atmosphere and shall be covered or enclosed in a manner so as to have no visual gaps or cracks in joints, seals, or other emission interfaces.

g. [61.347(a)] STANDARDS: OIL-WATER SEPARATORS - 40 CFR Part 61, Subpart FF

Except as provided in 40 CFR 61.352, the permittee shall meet the following standards for each oil-water separator in which waste is placed in accordance with 40 CFR 61.342(c)(1)(ii):

i. [61.347(a)(1)]
The permittee shall install, operate, and maintain a fixed-roof and closed-vent system that routes all organic vapors vented from the oil-water separator to a control device.

(a) [61.347(a)(1)(i)]
The fixed-roof shall meet the following requirements:

(i) [61.347(a)(1)(i)(A)]
The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h).

(ii) [61.347(a)(1)(i)(B)]
Each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that waste is in the oil-water separator except when it is necessary to use the opening for waste sampling or removal, or for equipment inspection, maintenance, or repair.

(iii) [61.347(a)(1)(i)(C)]
If the cover and closed-vent system operate such that the oil-water separator is maintained at a pressure less than atmospheric pressure, then paragraph (a)(1)(i)(B) of 40 CFR 61.347 does not apply to any opening that meets all of the following conditions:

(aa) [61.347(a)(1)(i)(C)(1)]
The purpose of the opening is to provide dilution air to reduce the explosion hazard;

(bb) [61.347(a)(1)(i)(C)(2)]
The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h); and

(cc) [61.347(a)(1)(i)(C)(3)]
The pressure is monitored continuously to ensure that the pressure in the oil-water separator remains below atmospheric pressure.

(b) [61.347(a)(1)(ii)]
The closed-vent system and control device shall be designed and operated in accordance with the requirements of 40 CFR 61.349.

h. [61.348] STANDARDS: TREATMENT PROCESSES - 40 CFR Part 61, Subpart FF

i. [61.348(a)]
Except as provided in paragraph 40 CFR 61.348(a)(5), the permittee shall treat the waste stream in accordance with the following requirements:

(a) [61.348(a)(1)]
The permittee shall design, install, operate, and maintain a treatment process that either:

(i) [61.348(a)(1)(i)]
Removes benzene from the waste stream to a level less than 10 parts per million by weight (ppmw) on a flow-weighted annual average basis;

(ii) [61.348(a)(1)(ii)]
Removes benzene from the waste stream by 99 percent or more on a mass basis; or

(iii) [61.348(a)(1)(iii)]
Destroys benzene in the waste stream by incinerating the waste in a combustion unit that achieves a destruction efficiency of 99 percent or greater for benzene.

(b) [61.348(a)(2)]
Each treatment process complying with 40 CFR 61.348(a)(1)(i) or (ii) shall be designed and operated in accordance with the appropriate waste management unit standards specified in 40 CFR 61.343 through 61.347 [See sections A.II. and A.III.]. For example, if a treatment process is a tank, then the permittee shall comply with 40 CFR 61.343 [See sections A.II. and A.III.].

(c) [61.348(a)(3)]
For the purpose of complying with the requirements specified in paragraph a.i. of 40 CFR 61.348, the intentional or unintentional reduction in the benzene concentration of a waste stream by dilution of the waste stream with other wastes or materials is not allowed.

(d) [61.348(a)(4)]
The permittee may aggregate or mix together individual waste streams to create a combined waste stream for the purpose of facilitating treatment of waste to comply with the requirements of paragraph (a)(1) of 40 CFR 61.348 except as provided by 40 CFR 61.348(a)(5).

(e) [61.348(a)(5)]
If the permittee aggregates or mixes any combination of process wastewater, product tank drawdown, or landfill leachate subject to 40 CFR 61.342(c)(1) [See section A.II.] together with other waste streams to create a combined waste stream for the purpose of facilitating management or treatment of waste in a wastewater treatment system, then the wastewater treatment system shall be operated in accordance with 40 CFR 61.348(b) These provisions apply to above-ground wastewater treatment systems as well as those that are at or below ground level.

ii. [61.348(b)]
Except for facilities complying with 40 CFR 61.342(e) the permittee that aggregates or mixes individual waste streams as defined in 61.348(a)(5) for management and treatment in a wastewater treatment system shall comply with the following requirements:

(a) [61.348(b)(1)]
The permittee shall design and operate each waste management unit that comprises the wastewater treatment system in accordance with the appropriate standards specified in 40 CFR 61.343 through 61.347 [See sections A.II. and A.III.].

(b) [61.348(b)(2)]
The provisions of 40 CFR 61.348(b)(1) do not apply to any waste management unit that the permittee demonstrates to meet the following conditions initially and, thereafter, at least once per year:

(i) [61.348(b)(2)(i)]
The benzene content of each waste stream entering the waste management unit is less than 10 ppmw on a flow-weighted annual average basis as determined by the procedures specified in 40 CFR 61.355(c) [See section A.V.]; and

(ii) [61.348(b)(2)(ii) and (b)(2)(ii)(A) and (b)(2)(ii)(B)]
The total annual benzene quantity contained in all waste streams managed or treated in exempt waste management units comprising the facility wastewater treatment systems is less than 1 Mg/yr (1.1 ton/yr) For this determination, total annual benzene quantity shall be calculated as follows:

(aa) The total annual benzene quantity shall be calculated as the sum of the individual benzene quantities determined at each location where a waste stream first enters an exempt waste management unit. The benzene quantity discharged from an exempt waste management unit shall not be included in this calculation.

(bb) The annual benzene quantity in a waste stream managed or treated in an enhanced biodegradation unit shall not be included in the calculation of the total annual benzene quantity, if the enhanced biodegradation unit is the first exempt unit in which the waste is managed or treated. A unit shall be considered enhanced biodegradation if it is a suspended-growth process that generates biomass, uses recycled biomass, and periodically removes biomass from the process. An enhanced biodegradation unit typically operates at a food-to-microorganism ratio in the range of 0.05 to 1.0 kg of biological oxygen demand per kg of biomass per day, a mixed liquor suspended solids ratio in the range of 1 to 8 grams per liter, and a residence time in the range of 3 to 36 hours.

iii. [61.348(c)]
The permittee shall demonstrate that each treatment process or wastewater treatment system unit, except as provided in 40 CFR 61.348(d), achieves the appropriate conditions specified in 40 CFR 61.348(a) or (b) in accordance with the following requirements:

(a) [61.348(c)(1)]
Engineering calculations in accordance with requirements specified in 40 CFR 61.356(e) [See section A.III.]; or

(b) [61.348(c)(2)]
Performance tests conducted using the test methods and procedures that meet the requirements specified in 40 CFR 61.355 [See section A.V.].

iv. [61.348(d)]
A treatment process or waste stream is in compliance with the requirements of 40 CFR 61 Subpart FF and exempt from the requirements of paragraph (c) of 40 CFR 61.348 provided that the permittee documents that the treatment process or waste stream is in compliance with other regulatory requirements as follows:

(a) [61.348(d)(1)]
The treatment process is a hazardous waste incinerator for which the permittee has been issued a final permit under 40 CFR Part 270 and complies with the requirements of 40 CFR Part 264, Subpart O;

(b) [61.348(d)(2)]
The treatment process is an industrial furnace or boiler burning hazardous waste for energy recovery for which the permittee has been issued a final permit under 40 CFR Part 270 and complies with the requirements of 40 CFR Part 266, Subpart D;

(c) [61.348(d)(3)]

The waste stream is treated by a means or to a level that meets benzene-specific treatment standards in accordance with the Land Disposal Restrictions under 40 CFR Part 268, and the treatment process is designed and operated with a closed-vent system and control device meeting the requirements of 40 CFR 61.349;

(d) [61.348(d)(4)]
The waste stream is treated by a means or to a level that meets benzene-specific effluent limitations or performance standards in accordance with the Effluent Guidelines and Standards under 40 CFR Parts 401-464, and the treatment process is designed and operated with a closed-vent system and control device meeting the requirements of 40 CFR 61.349; or

(e) [61.348(d)(5)]
The waste stream is discharged to an underground injection well for which the permittee has been issued a final permit under 40 CFR Part 270 and complies with the requirements of 40 CFR Part 122.

v. [61.348(e)]
Except as specified in 40 CFR 61.348(e)(3), if the treatment process or wastewater treatment system unit has any openings (e.g., access doors, hatches, etc.), all such openings shall be sealed (e.g., gasketed, latched, etc.) and kept closed at all times when waste is being treated, except during inspection and maintenance.

(a) [61.348(e)(3)]
If the cover and closed-vent system operate such that the treatment process and wastewater treatment system unit are maintained at a pressure less than atmospheric pressure, the permittee may operate the system with an opening that is not sealed and kept closed at all times if the following conditions are met:

(i) [61.348(e)(3)(i)]
The purpose of the opening is to provide dilution air to reduce the explosion hazard;

(ii) [61.348(e)(3)(ii)]
The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h) [See section A.V.]; and

(iii) [61.348(e)(3)(iii)]

The pressure is monitored continuously to ensure that the pressure in the treatment process and wastewater treatment system unit remain below atmospheric pressure.

vi. [61.348(f)]
Except for treatment processes complying with 40 CFR 61.348(d), the Administrator may request at any time a permittee demonstrate that a treatment process or wastewater treatment system unit meets the applicable requirements specified in 40 CFR 61.348(a) or 61.348(b) by conducting a performance test using the test methods and procedures as required in 40 CFR 61.355(h) [See section A.V.].

i. [61.349] STANDARDS: CLOSED VENT SYSTEMS AND CONTROL DEVICES - 40 CFR Part 61, Subpart FF

i. [61.349(a)]
For each closed-vent system and control device used to comply with standards in accordance with 40 CFR 61.343 through 61.348 [See sections A.II. and A.III.], the permittee shall properly design, install, operate, and maintain the closed-vent system and control device in accordance with the following requirements:

(a) [61.349(a)(1)]
The closed-vent system shall:

(i) [61.349(a)(1)(i)]
Be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h) [See section A.V.].

(ii) [61.349(a)(1)(ii); (a)(1)(ii)(A) and (a)(1)(ii)(B)]
Vent systems that contain any bypass line that could divert the vent stream away from a control device used to comply with the provisions of 40 CFR Part 61, Subpart FF shall install, maintain, and operate according to the manufacturer's specifications a flow indicator that provides a record of vent stream flow away from the control device at least once every 15 minutes, except as provided in paragraph (a)(1)(ii)(B) of 40 CFR 61.349.

(aa) The flow indicator shall be installed at the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere.

(bb) Where the bypass line valve is secured in the closed position with a car-seal or a lock-and-key type configuration, a flow indicator is not required.

(iii) [61.349(a)(1)(iii)]
All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

(iv) [61.349(a)(1)(iv)]
For each closed-vent system complying with 40 CFR 61.349(a), one or more devices which vent directly to the atmosphere may be used on the closed-vent system provided each device remains in a closed, sealed position during normal operations except when the device needs to open to prevent physical damage or permanent deformation of the closed-vent system resulting from malfunction of the unit in accordance with good engineering and safety practices for handling flammable, explosive, or other hazardous materials.

(b) [61.349(a)(2)]
The control device shall be designed and operated in accordance with the following conditions:

(i) [61.349(a)(2)(i)]
An enclosed combustion device (e.g., a vapor incinerator, boiler, or process heater) shall meet one of the following conditions:

(aa) Reduce the organic emissions vented to it by 95 weight percent or greater;

(bb) Achieve a total organic compound concentration of 20 ppmv (as the sum of the concentrations for individual compounds using Method 18) on a dry basis corrected to 3 percent oxygen; or

(cc) Provide a minimum residence time of 0.5 seconds at a minimum temperature of 760°C (1,400 °F) If a boiler or process heater issued as the control device, then the vent stream shall be introduced into the flame zone of the boiler or process heater.

(ii) [61.349(a)(2)(ii)]
A vapor recovery system (e.g., a carbon adsorption system or a condenser) shall recover or control the organic emissions vented to it with an efficiency of 95 weight percent or greater, or shall recover or control the benzene emissions vented to it with an efficiency of 98 weight percent or greater.

(iii) [61.349(a)(2)(iii)]
A flare shall comply with the requirements of 40 CFR 60.18.

(iv) [61.349(a)(2)(iv)]
A control device other than those described in paragraphs (a)(2)(i) through (iii) of 40 CFR 61.349 may be used provided that the following conditions are met:

(aa) [61.349(a)(2)(iv)(A)]
The device shall recover or control the organic emissions vented to it with an efficiency of 95 weight percent or greater, or shall recover or control the benzene emissions vented to it with an efficiency of 98 weight percent or greater.

(bb) [61.349(a)(2)(iv)(B)]
The permittee shall develop test data and design information that documents the control device will achieve an emission control efficiency of either 95 percent or greater for organic compounds or 98 percent or greater for benzene.

(cc) [61.349(a)(2)(iv)(C)]
The permittee shall identify:

(aaa) [61.349(a)(2)(iv)(C)(1)]
The critical operating parameters that affect the emission control performance of the device;

(bbb) [61.349(a)(2)(iv)(C)(2)]
The range of values of these operating parameters that ensure the emission control efficiency specified in paragraph (a)(2)(iv)(A) of 40 CFR 61.349 is maintained during operation of the device; and

(ccc) [61.349(a)(2)(iv)(C)(3)]
How these operating parameters will be monitored to ensure the proper operation and maintenance of the device.

(dd) [61.349(a)(2)(iv)(D)]
The permittee shall submit the information and data specified in 61.349(a)(2)(iv)(B) and (C) to the Administrator of U.S. EPA prior to operation of the alternative control device.

(ee) [61.349(a)(2)(iv)(E)]
The Administrator of U.S. EPA will determine, based on the information submitted under paragraph (a)(2)(iv)(D) of

40 CFR 61.349, if the control device subject to paragraph (a)(2)(iv) of 40 CFR 61.349 meets the requirements of 40 CFR 61.349. The control device subject to paragraph (a)(2)(iv) of 40 CFR 61.349 may be operated prior to receiving approval from the Administrator of USEPA. However, if the Administrator of USEPA determines that the control device does not meet the requirements of 40 CFR 61.349, the facility may be subject to enforcement action beginning from the time the control device began operation.

ii. [61.349(b)]
Each closed-vent system and control device used to comply with 40 CFR Part 61, Subpart FF shall be operated at all times when waste is placed in the waste management unit vented to the control device except when maintenance or repair of the waste management unit cannot be completed without a shutdown of the control device.

iii. [61.349(c)]
The permittee shall demonstrate that each control device, except for a flare, achieves the appropriate conditions specified in 40 CFR 61.349(a)(2) by using one of the following methods:

(a) [61.349(c)(1)]
Engineering calculations in accordance with requirements specified in 40 CFR 61.356(f) [See section A.III.]; or

(b) [61.349(c)(2)]
Performance tests conducted using the test methods and procedures that meet the requirements specified in 40 CFR 61.355 [See section A.V.].

iv. [61.349(d)]
The permittee shall demonstrate compliance of each flare in accordance with 61.349(a)(2)(iii).

v. [61.349(e)]
The Administrator may request at any time a permittee demonstrate that a control device meets the applicable conditions specified in 40 CFR 61.349(a)(2) by conducting a performance test using the test methods and procedures as required in 40 CFR 61.355 [See section A.V.], and for control devices subject to 40 CFR 61.349(a)(2)(iv), the Administrator may specify alternative test methods and procedures, as appropriate

j. [61.351] ALTERNATIVE STANDARDS FOR TANKS - 40 CFR Part 61, Subpart FF

i. [61.351(a)]

As an alternative to the standards for tanks specified in 40 CFR 61.343 [See section A.II.], the permittee may elect to comply with one of the following:

(a) [61.351(a)(1)]
A fixed roof and internal floating roof meeting the requirements in 40 CFR 60.112b(a)(1);

(b) [61.351(a)(2)]
An external floating roof meeting the requirements of 40 CFR 60.112b(a)(2); or

(c) [61.351(a)(3)]
An alternative means of emission limitation as described in 40 CFR 60.114b.

ii. [61.351(b)]
If the permittee elects to comply with the provisions of 40 CFR 61.351, then the permittee is exempt from the provisions of 40 CFR 61.343 [See section A.II.] applicable to the same facilities.

k. [61.352] Alternative standards for oil-water separators

i. [61.352(a)]
As an alternative to the standards for oil-water separators specified in 40 CFR 61.347, the permittee may elect to comply with one of the following:

(a) [63.652(a)(1)]
A floating roof meeting the requirements in 40 CFR 60.693-2(a); or

(b) [63.654(a)(2)]
An alternative means of emission limitation as described in 40 CFR 60.694.

ii. [61.352(b)]
For portions of the oil-water separator where it is infeasible to construct and operate a floating roof, such as over the weir mechanism, a fixed roof vented to a vapor control device that meets the requirements in 40 CFR 61.347 and 61.349 shall be installed and operated.

iii. [61.352(c)]
Except as provided in paragraph (b) of 40 CFR 61.352, if the permittee elects to comply with the provisions of 40 CFR 61.352, then the permittee is exempt from the provisions in 40 CFR 61.347 applicable to the same facilities.

l. [61.353] Alternative means of emission limitation - 40 CFR Part 61, Subpart FF

i. [61.353(a)]

If, in the Administrator of U.S. EPA's judgment, an alternative means of emission limitation will achieve a reduction in benzene emissions at least equivalent to the reduction in benzene emissions from the source achieved by the applicable design, equipment, work practice, or operational requirements in 40 CFR Part 61.342 through 61.349, the Administrator of U.S. EPA will publish in the Federal Register a notice permitting the use of the alternative means for purposes of compliance with that requirement. The notice may condition the permission on requirements related to the operation and maintenance of the alternative means.

ii. [61.353(b)]
Any notice under paragraph (a) of 40 CFR 61.353 shall be published only after public notice and an opportunity for a hearing.

iii. [61.353(c)]
Any person seeking permission under 40 CFR 61.353 shall collect, verify, and submit to the Administrator information showing that the alternative means achieves equivalent emission reductions.

3. 40 CFR Part 60, Subpart QQQ

a. [60.692-1] STANDARDS: General

i. [60.692-1(c)]
Permission to use alternative means of emission limitation to meet the requirements of 40 CFR 60.692-2 through 60.692-4 may be granted as provided in 40 CFR 60.694.

ii. [60.692-1(d)(1)]
Stormwater sewer systems are not subject to the requirements of 40 CFR Part 60, Subpart QQQ.

iii. [60.692-1(d)(2)]
Ancillary equipment, which is physically separate from the wastewater system and does not come in contact with or store oily wastewater, is not subject to the requirements of 40 CFR Part 60, Subpart QQQ.

iv. [60.692-1(d)(3)]
Non-contact cooling water systems are not subject to the requirements of 40 CFR Part 60, Subpart QQQ.

v. [60.692-1(d)(4)]
The permittee shall demonstrate compliance with the exclusions in paragraphs (d)(1), (2), and (3) of 60.692-1 as provided in 40 CFR 60.697(h), (i), and (j) See section A.III].

b. [60.692-2] STANDARDS: Individual Drain Systems - 40 CFR Part 60, Subpart QQQ

i. [60.692-2(a)(1)]
Each drain shall be equipped with water seal controls.

ii. [60.692-2(b)(1)]
Junction boxes shall be equipped with a cover and may have an open vent pipe. The vent pipe shall be at least 90 cm (3 ft) in length and shall not exceed 10.2 cm (4 in) in diameter.

iii. [60.692-2(b)(2)]
Junction box covers shall have a tight seal around the edge and shall be kept in place at all times, except during inspection and maintenance.

iv. [60.692-2(c)]
Sewer lines shall not be open to the atmosphere and shall be covered or enclosed in a manner so as to have no visual gaps or cracks in joints, seals, or other emission interfaces.

v. [60.692-2(d)]
Except as provided in paragraph (e) of 40 CFR 60.692, each modified or reconstructed individual drain system that has a catch basin in the existing configuration prior to May 4, 1987 shall be exempt from the provisions 40 CFR 60.692-2.

vi. [60.692-2(e)]
Refinery wastewater routed through new process drains and a new first common downstream junction box, either as part of a new individual drain system or an existing individual drain system, shall not be routed through a downstream catch basin.

c. [60.692-3] STANDARDS: Oil-water separators - 40 CFR Part 60, Subpart QQQ

i. [60.692-3(a)]
Each oil-water separator tank, slop oil tank, storage vessel, or other auxiliary equipment subject to the requirements of this subpart shall be equipped and operated with a fixed roof, which meets the following specifications, except as provided in 40 CFR 60.692-3(d) or in 40 CFR 60.693-2.

(a) [60.692-3(a)(1)]
The fixed roof shall be installed to completely cover the separator tank, slop oil tank, storage vessel, or other auxiliary equipment with no separation between the roof and the wall.

(b) [60.692-3(a)(2)]
The vapor space under a fixed roof shall not be purged unless the vapor is directed to a control device.

(c) [60.692-3(a)(3)]

If the roof has access doors or openings, such doors or openings shall be gasketed, latched, and kept closed at all times during operation of the separator system, except during inspection and maintenance.

ii. [60.692-3(b)]
Each oil-water separator tank or auxiliary equipment with a design capacity to treat more than 16 liters per second (250 gallons per minute (gpm)) of refinery wastewater shall, in addition to the requirements in paragraph (a) of 40 CFR 60.692-3, be equipped and operated with a closed vent system and control device, which meet the requirements of 40 CFR 60.692-5, except as provided in paragraph (c) of 40 CFR 60.692-3 or in 40 CFR 60.693-2.

iii. [60.692-3(c)]
Each modified or reconstructed oil-water separator tank with a maximum design capacity to treat less than 38 liters per second (600 gpm) of refinery wastewater which was equipped and operated with a fixed roof covering the entire separator tank or a portion of the separator tank prior to May 4, 1987 shall be exempt from the requirements of 40 CFR 60.692-3(b), but shall meet the requirements of 40 CFR 60.692-3(a), or may elect to comply with 40 CFR 60.692-3(c)(2).

iv. [60.692-3(c)(2)]
The permittee may elect to comply with the requirements of 40 CFR 60.692-3(a) for the existing fixed roof covering a portion of the separator tank and comply with the requirements for floating roofs in 40 CFR 60.693-2 for the remainder of the separator tank.

v. [60.692-3(d)]
Storage vessels, including slop oil tanks and other auxiliary tanks that are subject to the requirements of 40 CFR Part 60, Subparts K, Ka, or Kb, are not subject to the requirements of 40 CFR 60.692-3.

vi. [60.692-3(e)]
Slop oil from an oil-water separator tank and oily wastewater from slop oil handling equipment shall be collected, stored, transported, recycled, reused, or disposed of in an enclosed system. Once slop oil is returned to the process unit or is disposed of, it is no longer within the scope of this subpart. Equipment used in handling slop oil shall be equipped with a fixed roof meeting the requirements of 40 CFR 60.692-3(a).

vii. [60.692-3(f)]
Each oil-water separator tank, slop oil tank, storage vessel, or other auxiliary equipment that is required to comply with 40 CFR 60.692-3(a), and not 40 CFR 60.692-3(b), may be equipped with a pressure control valve as necessary for proper system operation. The pressure control valve shall be set at the maximum pressure necessary for proper system operation, but such that the value will not vent continuously.

d. [60.692-4] Standards: Aggregate facility - 40 CFR Part 60, Subpart QQQ
A new, modified, or reconstructed aggregate facility shall comply with the requirements of 40 CFR 60.692-2 and 60.692-3.

e. [60.692-5] Standards: Closed vent systems and control devices - 40 CFR Part 60, Subpart QQQ

i. [60.692-5(a)]
Enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816°C (1,500°F).

ii. [60.692-5(b)]
Vapor recovery systems (for example, condensers and adsorbers) shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater.

iii. 40 CFR 60.692-5(c)
Flares used to comply with this subpart shall comply with the requirements of 40 CFR 60.18.

iv. [60.692-5(d)]
Closed vent systems and control devices used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.

v. [60.692-5(e)(1)]
Closed vent systems shall be designed and operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined during the initial and semiannual inspections by the methods specified in 40 CFR 60.696 [See section A.V].

vi. [60.692-5(e)(2)]
Closed vent systems shall be purged to direct vapor to the control device.

vii. [60.692-5(e)(3)]
A flow indicator shall be installed on a vent stream to a control device to ensure that the vapors are being routed to the device.

viii. [60.692-5(e)(4)]
All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

ix. [60.692-5(e)(5)]
When emissions from a closed system are detected, first efforts at repair to eliminate the emissions shall be made as soon as practicable, but not later than 30

calendar days from the date the emissions are detected, except as provided in 40 CFR 60.692-6 [See section A.III].

f. [60.692-7] Standards: Delay of compliance.

i. [60.692-7(a)]
Delay of compliance of modified individual drain systems with ancillary downstream treatment components will be allowed if compliance with the provisions of this subpart cannot be achieved without a refinery or process unit shutdown.

ii. [60.692-7(b)]
Installation of equipment necessary to comply with the provisions of 40 CFR Part 60, Subpart QQQ shall occur no later than the next scheduled refinery or process unit shutdown.

g. [60.693-1] Alternative standards for individual drain systems.

i. [60.693-1(a)]
The permittee may elect to construct and operate a completely closed drain system.

ii. [60.693-1(b)]
Each completely closed drain system shall be equipped and operated with a closed vent system and control device complying with the requirements of 40 CFR 60.692-5.

iii. [60.693-1(c)]
The permittee must notify the Administrator in the report required in 40 CFR 60.7 that the permittee has elected to construct and operate a completely closed drain system.

iv. [60.693-1(d)]
If the permittee elects to comply with the provisions of 40 CFR 60.693-1, then the permittee does not need to comply with the provisions of 40 CFR 60.692-2 or 60.694.

v. [60.693-1(e)(e)(1)]
Sewer lines shall not be open to the atmosphere and shall be covered or enclosed in a manner so as to have no visual gaps or cracks in joints, seals, or other emission interfaces.

h. [60.693-2] Alternative standards for oil-water separators.

i. [60.693-2(a)]

The permittee may elect to construct and operate a floating roof on an oil-water separator tank, slop oil tank, storage vessel, or other auxiliary equipment subject to the requirements of this subpart which meets the following specifications.

(a) [60.693-2(a)(1)]
Each floating roof shall be equipped with a closure device between the wall of the separator and the roof edge. The closure device is to consist of a primary seal and a secondary seal.

(i) [60.693-2(a)(1)(i)]
The primary seal shall be a liquid-mounted seal.

(aa) [60.693-2(a)(1)(i)(A)]
A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the separator and the floating roof.

(bb) [60.693-2(a)(1)(i)(B)]
The gap width between the primary seal and the separator wall shall not exceed 3.8 cm (1.5 in.) at any point.

(cc) [60.693-2(a)(1)(i)(C)]
The total gap area between the primary seal and the separator wall shall not exceed 67 cm2/m (3.2 in.2/ft) of separator wall perimeter.

(ii) [60.693-2(a)(1)(ii)]
The secondary seal shall be above the primary seal and cover the annular space between the floating roof and the wall of the separator.

(aa) [60.693-2(a)(1)(ii)(A)]
The gap width between the secondary seal and the separator wall shall not exceed 1.3 cm (0.5 in.) at any point.

(bb) [60.693-2(a)(1)(ii)(B)]
The total gap area between the secondary seal and the separator wall shall not exceed 6.7 cm2/m (0.32 in.2/ft) of separator wall perimeter.

(b) [60.693-2(a)(2)]
Except as provided in40 CFR 60.693-2(a)(4), each opening in the roof shall be equipped with a gasketed cover, seal, or lid, which shall be maintained in a closed position at all times, except during inspection and maintenance.

(c) [60.693-2(a)(3)]
The roof shall be floating on the liquid (i.e., off the roof supports) at all times except during abnormal conditions (i.e., low flow rate).

(d) [60.693-2(a)(4)]
The floating roof may be equipped with one or more emergency roof drains for removal of stormwater. Each emergency roof drain shall be fitted with a slotted membrane fabric cover that covers at least 90 percent of the drain opening area or a flexible fabric sleeve seal.

ii. [60.693-2(b)]
The permittee must notify the Administrator in the report required by 40 CFR 60.7 that the permittee has elected to construct and operate a floating roof under 40 CFR 60.693-2(a).

iii. [60.693-2(c)]
For portions of the oil-water separator tank where it is infeasible to construct and operate a floating roof, such as the skimmer mechanism and weirs, a fixed roof meeting the requirements of 40 CFR 60.692-3(a) shall be installed.

iv. [60.693-2(d)]
Except as provided in 40 CFR 60.693-2(c), if the permittee elects to comply with the provisions of 40 CFR 60.693-2, then the permittee does not need to comply with the provisions of 40 CFR 60.692-3 or 60.694 applicable to the same facilities.

i. [60.694] Permission to use alternative means of emission limitation 40 CFR Part 60, Subpart QQQ

i. [60.694(a)]
If, in the Administrator's judgment, an alternative means of emission limitation will achieve a reduction in VOC emissions at least equivalent to the reduction in VOC emissions achieved by the applicable requirement in 40 CFR 60.692, the Administrator will publish in the FEDERAL REGISTER a notice permitting the use of the alternative means for purposes of compliance with that requirement. The notice may condition the permission on requirements related to the operation and maintenance of the alternative means.

ii. [ 60.694(b)]
Any notice under 40 CFR 60.694(a) shall be published only after notice and an opportunity for a hearing.

iii. [60.694(c)]
Any person seeking permission under this section shall collect, verify, and submit to the Administrator information showing that the alternative means achieves equivalent emission reductions.

## III. Monitoring and/or Record Keeping Requirements

1. 40 CFR Part 63, Subpart CC

   a. Each permittee subject to the wastewater provisions in 40 CFR 63.647 [See section A.II.] shall comply with the record keeping and reporting provisions in 40 CFR 61.356 and 61.357 of 40 CFR Part 61, Subpart FF [See sections A.III. and A.IV.] unless they are complying with the wastewater provisions specified in 40 CFR 63.640(o)(2)(ii) There are no additional reporting and record keeping requirements for wastewater under this subpart unless a wastewater stream is included in an emissions average.

   b. Miscellaneous Process Vents
   See the applicable sections in Part II for miscellaneous process vents in A.III., referencing 40 CFR Part 63, Subpart CC.

2. 40 CFR Part 61, Subpart FF - National Emission Standard for Benzene Waste Operations

   a. [61.343] STANDARDS: TANKS

      i. [61.343(c)]
      Each fixed-roof, seal, access door, and all other openings shall be checked by visual inspection initially and quarterly thereafter to ensure that no cracks or gaps occur and that access doors and other openings are closed and gasketed properly.

      ii. [61.343(d)]
      Except as provided in 40 CFR 61.350 [See section A.III.], when a broken seal or gasket or other problem is identified, or when detectable emissions are measured, first efforts at repair shall be made as soon as practicable, but not later than 45 calendar days after identification.

   b. [61.344] STANDARDS: SURFACE IMPOUNDMENTS - 40 CFR Part 61, Subpart FF

      i. [61.344(b)]
      Each cover seal, access hatch, and all other openings shall be checked by visual inspection initially and quarterly thereafter to ensure that no cracks or gaps occur and that access hatches and other openings are closed and gasketed properly.

      ii. [61.344(c)]
      Except as provided in 40 CFR 61.350 [See section A.III], when a broken seal or gasket or other problem is identified, or when detectable emissions are measured, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after identification.

   c. [61.345] STANDARDS: CONTAINERS - 40 CFR Part 61, Subpart FF

      i. [61.345(b)]

Each cover and all openings shall be visually inspected initially and quarterly thereafter to ensure that they are closed and gasketed properly.

ii. [61.345(c)]
Except as provided in 40 CFR 61.350 [See section A.III.], when a broken seal or gasket or other problem is identified, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after identification.

d. [61.346] STANDARDS: INDIVIDUAL DRAIN SYSTEMS - 40 CFR Part 61, Subpart FF

i. [61.346(a)(2)]
Each cover seal, access hatch, and all other openings shall be checked by visual inspection initially and quarterly thereafter to ensure that no cracks or gaps occur and that access hatches and other openings are closed and gasketed properly.

ii. [61.346(a)(3)]
Except as provided in 40 CFR 61.350 [See section A.III.], when a broken seal or gasket or other problem is identified, or when detectable emissions are measured, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after identification.

iii. [61.346(b)(4)]
If the permittee elects to comply with the alternative standards under 40 CFR 61.346(b) [See section A.III], then the permittee shall inspect the equipment installed under 40 CFR 63.646(b)(1), (b)(2), or (b)(3) as follows in lieu of 40 CFR 61.346(a)(2) and (a)(3):

(a) [63.646(b)(4)(i)]
Each drain using water seal controls shall be checked by visual or physical inspection initially and thereafter quarterly for indications of low water levels or other conditions that would reduce the effectiveness of water seal controls.

(b) [61.346(b)(4)(ii)]
Each drain using a tightly sealed cap or plug shall be visually inspected initially and thereafter quarterly to ensure caps or plugs are in place and properly installed.

(c) [61.346(b)(4)(iii)]
Each junction box shall be visually inspected initially and thereafter quarterly to ensure that the cover is in place and to ensure that the cover has a tight seal around the edge.

(d) [61.346(b)(4)(iv)]
The unburied portion of each sewer line shall be visually inspected initially and thereafter quarterly for indication of cracks, gaps, or other problems that could result in benzene emissions.

(e) [61.346(b)(5)]

Except as provided in 40 CFR 61.350 [See section A.III], when a broken seal, gap, crack or other problem is identified, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after identification.

e. [61.347] STANDARDS: Oil-Water Separators

i. [61.347(b)]
Each cover seal, access hatch, and all other openings shall be checked by visual inspection initially and quarterly thereafter to ensure that no cracks or gaps occur between the cover and oil-water separator wall and that access hatches and other openings are closed and gasketed properly.

ii. [61.347(c)]
Except as provided in 40 CFR 61.350, when a broken seal or gasket or other problem is identified, or when detectable emissions are measured, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after identification.

f.. [61.348] STANDARDS: TREATMENT PROCESSES - 40 CFR Part 61, Subpart FF

i. [61.348(e)(1)]
Each seal, access door, and all other openings shall be checked by visual inspections initially and quarterly thereafter to ensure that no cracks or gaps occur and that openings are closed and gasketed properly.

ii. [61.348(e)(2)]
Except as provided in 40 CFR 61.350 [See section A.III.], when a broken seal or gasket or other problem is identified, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after identification.

iii. [61.348(g)]
The permittee of a treatment process or wastewater treatment system unit that is used to comply with the provisions of 40 CFR 61.348 shall monitor the unit in accordance with the applicable requirements in 40 CFR 61.354 [See section A.III.].

g. [61.349] STANDARDS: CLOSED VENT SYSTEMS- 40 CFR Part 61, Subpart FF

i. [61.349(f)]
Each closed-vent system and control device shall be visually inspected initially and quarterly thereafter. The visual inspection shall include inspection of ductwork and piping and connections to covers and control devices for evidence of visible defects such as holes in ductwork or piping and loose connections.

ii. [61.349(g)]

Except as provided in 61.350 [See section A.III.], if visible defects are observed during an inspection, or if other problems are identified, or if detectable emissions are measured, a first effort to repair the closed-vent system and control device shall be made as soon as practicable but no later than 5 calendar days after detection. Repair shall be completed no later than 15 calendar days after the emissions are detected or the visible defect is observed.

iii. [61.349(h)]
The permittee of a control device that is used to comply with the provisions of 40 CFR 61.349 shall monitor the control device in accordance with 40 CFR 61.354(c) [See section A.III].

h. [61.350] STANDARDS: DELAY OF REPAIR - 40 CFR Part 61, Subpart FF

i. [61.350(a)]
Delay of repair of facilities or units that are subject to the provisions will be allowed if the repair is technically impossible without a complete or partial facility or unit shutdown.

ii. [61.350(b)]
Repair of such equipment shall occur before the end of the next facility or unit shutdown.

i. [61.354] MONITORING OF OPERATIONS - 40 CFR Part 61, Subpart FF

i. [61.354(a)]
Except for a treatment process or waste stream complying with 40 CFR 61.348(d), the permittee shall monitor each treatment process or wastewater treatment system unit to ensure the unit is properly operated and maintained by one of the following monitoring procedures:

(a) [61.354(a)(1)]
Measure the benzene concentration of the waste stream exiting the treatment process complying with 40 CFR 61.348(a)(1)(i) [See section A.II] at least once per month by collecting and analyzing one or more samples using the procedures specified in 40 CFR 61.355(c)(3) [ See section A.V].

(b) [61.354(a)(2)]
Install, calibrate, operate, and maintain according to manufacturer's specifications equipment to continuously monitor and record a process parameter (or parameters) for the treatment process or wastewater treatment system unit that indicates proper system operation. The permittee shall inspect at least once each operating day the data recorded by the monitoring equipment (e.g., temperature monitor or flow indicator) to ensure that the unit is operating properly.

ii.. [61.354(b)]
If a permittee complies with the requirements of 40 CFR 61.348(b) [See section A.II.], then the permittee shall monitor each wastewater treatment system to ensure the unit is properly operated and maintained by the appropriate monitoring procedure as follows:

(a) [61.354(b)(1)]
For the first exempt waste management unit in each waste treatment train, other than an enhanced biodegradation unit, measure the flow rate, using the procedures of 40 CFR 61.355(b) [See section A.V.], and the benzene concentration of each waste stream entering the unit at least once per month by collecting and analyzing one or more samples using the procedures specified in 40 CFR 61.355(c)(3) [See section A.V.].

(b) [61.354(b)(2)]
For each enhanced biodegradation unit that is the first exempt waste management unit in a treatment train, measure the benzene concentration of each waste stream entering the unit at least once per month by collecting and analyzing one or more samples using the procedures specified in 40 CFR 61.355(c)(3) [See section A.V.].

iii. [61.354(c)]
The permittee subject to the requirements in 40 CFR 61.349 [See section A.II] shall install, calibrate, maintain, and operate according to the manufacturer's specifications a device to continuously monitor the control device operation as specified in the following paragraphs, unless alternative monitoring procedures or requirements are approved for that facility by the Administrator of USEPA. The permittee shall inspect at least once each operating day the data recorded by the monitoring equipment (e.g., temperature monitor or flow indicator) to ensure that the control device is operating properly.

(a) [61.354(c)(1)]
For a thermal vapor incinerator, a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of ±1 percent of the temperature being monitored in °C or ±0.5°C, whichever is greater. The temperature sensor shall be installed at a representative location in the combustion chamber.

(b) [61.354(c)(2)]
For a catalytic vapor incinerator, a temperature monitoring device equipped with a continuous recorder. The device shall be capable of monitoring temperature at two locations, and have an accuracy of ±1 percent of the temperature being monitored in °C or ±0.5°C, whichever is greater. One temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed inlet and a second temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed outlet.

(c) [61.354(c)(3)]
For a flare, a monitoring device in accordance with 40 CFR 60.18(f)(2) equipped with a continuous recorder.

(d) [61.354(c)(4)]
For a boiler or process heater having a design heat input capacity less than 44 MW (150 x $10^6$ Btu), a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of ±1 percent of the temperature being monitored in °C or ±0.5°C, whichever is greater. The temperature sensor shall be installed at a representative location in the combustion chamber.

(e) [61.354(c)(5)]
For a boiler or process heater having a design heat input capacity greater than or equal to 44 MW (150 x $10^6$ Btu), a monitoring device equipped with a continuous recorder to measure a parameter(s) that indicates good combustion operating practices are being used.

(f) [61.354(c)(6)]
For a condenser, either:

(i) [61.354(c)(6)(i)]
A monitoring device equipped with a continuous recorder to measure either the concentration level of the organic compounds or the concentration level of benzene in the exhaust vent stream from the condenser; or

(ii) [CFR 61.354(c)(6)(ii)]
A temperature monitoring device equipped with a continuous recorder. The device shall be capable of monitoring temperature at two locations, and have an accuracy of ±1 percent of the temperature being monitored in °C or ±0.5°C, whichever is greater. One temperature sensor shall be installed at a location in the exhaust stream from the condenser, and a second temperature sensor shall be installed at a location in the coolant fluid exiting the condenser.

(g) [61.354(c)(7)]
For a carbon adsorption system that regenerates the carbon bed directly in the control device such as a fixed-bed carbon adsorber, either:

(i) [61.354(c)(7)(i)]
A monitoring device equipped with a continuous recorder to measure either the concentration level of the organic compounds or the benzene concentration level in the exhaust vent stream from the carbon bed; or

(ii) [61.354(c)(7)(ii)]
A monitoring device equipped with a continuous recorder to measure a parameter that indicates the carbon bed is regenerated on a regular, predetermined time cycle.

(h) [61.354(c)(8)]
For a vapor recovery system other than a condenser or carbon adsorption system, a monitoring device equipped with a continuous recorder to measure either the concentration level of the organic compounds or the benzene concentration level in the exhaust vent stream from the control device.

(i) [61.354(c)(9)]
For a control device subject to the requirements of 40 CFR 61.349(a)(2)(iv) [See section A.II], devices to monitor the parameters as specified in 40 CFR 61.349(a)(2)(iv)(C)

iv. [61.354(d)]
For a carbon adsorption system that does not regenerate the carbon bed directly on site in the control device (e.g., a carbon canister), either the concentration level of the organic compounds or the concentration level of benzene in the exhaust vent stream from the carbon adsorption system shall be monitored on a regular schedule, and the existing carbon shall be replaced with fresh carbon immediately when carbon breakthrough is indicated. The device shall be monitored on a daily basis or at intervals no greater than 20 percent of the design carbon replacement interval, whichever is greater. As an alternative to conducting this monitoring, a permittee may replace the carbon in the carbon adsorption system with fresh carbon at a regular predetermined time interval that is less than the carbon replacement interval that is determined by the maximum design flow rate and either the organic concentration or the benzene concentration in the gas stream vented to the carbon adsorption system.

v. [61.354(e)]
An alternative operation or process parameter may be monitored if it can be demonstrated that another parameter will ensure that the control device is operated in conformance with these standards and the control device's design specifications.

vi. [61.354(f)]
The permittee using a closed-vent system that contains any bypass line that could divert a vent stream from a control device used to comply with the provisions of 40 CFR Part 61, Subpart FF shall do the following:

(a) [61.354(f)(1)]
Visually inspect the bypass line valve at least once every month, checking the position of the valve and the condition of the car-seal or closure mechanism required under 40 CFR 61.349(a)(1)(ii) [See section A.II] to

ensure that the valve is maintained in the closed position and the vent stream is not diverted through the bypass line.

(b) [61.354(f)(2)]
Visually inspect the readings from each flow monitoring device required by 40 CFR 61.349(a)(1)(ii) at least once each operating day to check that vapors are being routed to the control device as required.

vii. [61.354(g)]
Each permittee who uses a system for emission control that is maintained at a pressure less than atmospheric pressure with openings to provide dilution air shall install, calibrate, maintain, and operate according to the manufacturer's specifications a device equipped with a continuous recorder to monitor the pressure in the unit to ensure that it is less than atmospheric pressure.

j. [61.356] RECORD KEEPING REQUIREMENTS - 40 CFR Part 61, Subpart FF

i. [61.356(a)]
The permittee shall comply with the record keeping requirements of 40 CFR 61.356. Each record shall be maintained in a readily accessible location at the facility site for a period not less than two years from the date the information is recorded unless otherwise specified.

ii. [61.356(b)]
The permittee shall maintain records that identify each waste stream at the facility subject to 40 CFR Part 61, Subpart FF, and indicate whether or not the waste stream is controlled for benzene emissions in accordance with this subpart. In addition the permittee shall maintain the following records:

(a) [61.356(b)(1)]
For each waste stream not controlled for benzene emissions in accordance with this subpart, the records shall include all test results, measurements, calculations, and other documentation used to determine the following information for the waste stream: waste stream identification, water content, whether or not the waste stream is a process wastewater stream, annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.

(b) [61.356(b)(2)]
For each waste stream exempt from 40 CFR 61.342(c)(1) [See section A.II.] in accordance with 40 CFR 61.342(c)(3) [See section A.II.], the records shall include:

(i) [61.356(b)(2)(i)]
All measurements, calculations, and other documentation used to determine that the continuous flow of process wastewater is less than 0.02 liters (0.005 gallons) per minute or the annual waste

quantity of process wastewater is less than 10 Mg/yr (11 ton/yr) in accordance with 40 CFR 61.342(c)(3)(i) [See section A.II.], or

(ii) [61.356(b)(2)(ii)]
All measurements, calculations, and other documentation used to determine that the sum of the total annual benzene quantity in all exempt waste streams does not exceed 2.0 Mg/yr (2.2 ton/yr) in accordance with 40 CFR 61.342(c)(3)(ii) [See section A.II.].

(c) [61.356(b)(3)]
For each facility where process wastewater streams are controlled for benzene emissions in accordance with 40 CFR 61.342(d) , the records shall include for each treated process wastewater stream all measurements, calculations, and other documentation used to determine the annual benzene quantity in the process wastewater stream exiting the treatment process.

(d) [61.356(b)(4)]
For each facility where waste streams are controlled for benzene emissions in accordance with 40 CFR 61.342(e), the records shall include for each waste stream all measurements, including the locations of the measurements, calculations, and other documentation used to determine that the total benzene quantity does not exceed 6.0 Mg/yr (6.6 ton/yr).

(e) [61.356(b)(5)]
For each facility where the annual waste quantity for process unit turnaround waste is determined in accordance with 40 CFR 61.355(b)(5) [See section A.V.], the records shall include all test results, measurements, calculations, and other documentation used to determine the following information: identification of each process unit at the facility that undergoes turnarounds, the date of the most recent turnaround for each process unit, identification of each process unit turnaround waste, the water content of each process unit turnaround waste, the annual waste quantity determined in accordance with 40 CFR 61.355(b)(5) [See section A.V.], the range of benzene concentrations in the waste, the annual average flow-weighted benzene concentration of the waste, and the annual benzene quantity calculated in accordance with 40 CFR 61.355(a)(1)(iii) [See section A.V.].

(f) [61.356(b)(6)]
For each facility where wastewater streams are controlled for benzene emissions in accordance with 40 CFR 61.348(b)(2) [See section A.II.], the records shall include all measurements, calculations, and other documentation used to determine the annual benzene content of the waste streams and the total annual benzene quantity contained in all waste streams managed or treated in exempt waste management units.

iii. [61.356(c)]
The permittee transferring waste off-site to another facility for treatment in accordance with 40 CFR 61.342(f) [See section A.II] shall maintain documentation for each offsite waste shipment that includes the following information: Date waste is shipped offsite, quantity of waste shipped offsite, name and address of the facility receiving the waste, and a copy of the notice sent with the waste shipment.

iv. [61.356(d)]
A permittee using control equipment in accordance with 40 CFR 61.343 through 61.347 [See sections A.II] shall maintain engineering design documentation for all control equipment that is installed on the waste management unit. The documentation shall be retained for the life of the control equipment. If a control device is used, then the permittee shall maintain the control device records required by 40 CFR 61.355(f) [See section A.IV].

v. [61.356(e)]
A permittee using a treatment process or wastewater treatment system unit in accordance with 40 CFR 61.348 [See section A.II.] shall maintain the following records. The documentation shall be retained for the life of the unit.

(a) [61.356(e)(1)]
A statement signed and dated by the permittee certifying that the unit is designed to operate at the documented performance level when the waste stream entering the unit is at the highest waste stream flow rate and benzene content expected to occur.

(b) [61.356(e)(2)]
If engineering calculations are used to determine treatment process or wastewater treatment system unit performance, then the permittee shall maintain the complete design analysis for the unit. The design analysis shall include for example the following information: Design specifications, drawings, schematics, piping and instrumentation diagrams, and other documentation necessary to demonstrate the unit performance.

(c) [61.356(e)(3)]
If performance tests are used to determine treatment process or wastewater treatment system unit performance, then the permittee shall maintain all test information necessary to demonstrate the unit performance.

(i) [61.356(e)(3)(i)]
A description of the unit including the following information: type of treatment process; manufacturer name and model number; and for each waste stream entering and exiting the unit, the waste stream type (e.g., process wastewater, sludge, slurry, etc.), and the design flow rate and benzene content.

(ii) [61.356(e)(3)(ii)]
Documentation describing the test protocol and the means by which sampling variability and analytical variability were accounted for in the determination of the unit performance. The description of the test protocol shall include the following information: sampling locations, sampling method, sampling frequency, and analytical procedures used for sample analysis.

(iii) [61.356(e)(3)(iii)]
Records of unit operating conditions during each test run including all key process parameters.

(iv) [61.356(e)(3)(iv)]
All test results.

(d) [61.356(e)(4)]
If a control device is used, then the permittee shall maintain the control device records required by 40 CFR 61.356(f).

vi. [61.356(f)]
The permittee using a closed-vent system and control device in accordance with 40 CFR 61.349 [See section A.II.] shall maintain the following records. The documentation shall be retained for the life of the control device.

(a) [61.356(f)(1)]
A statement signed and dated by the permittee certifying that the closed-vent system and control device is designed to operate at the documented performance level when the waste management unit vented to the control device is or would be operating at the highest load or capacity expected to occur.

(b) [61.356(f)(2)]
If engineering calculations are used to determine control device performance in accordance with 40 CFR 61.349(c), then a design analysis for the control device that includes for example:

(i) [61.356(f)(2)(i)]
Specifications, drawings, schematics, and piping and instrumentation diagrams prepared by the permittee, or the control device manufacturer or vendor that describe the control device design based on acceptable engineering texts. The design analysis shall address the following vent stream characteristics and control device operating parameters:

(aa) [61.356(f)(2)(i)(A)]
For a thermal vapor incinerator, the design analysis shall consider the vent stream composition, constituent

concentrations, and flow rate. The design analysis shall also establish the design minimum and average temperature in the combustion zone and the combustion zone residence time.

(bb) [61.356(f)(2)(i)(B)]
For a catalytic vapor incinerator, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average temperatures across the catalyst bed inlet and outlet.

(cc) [61.356(f)(2)(i)(C)]
For a boiler or process heater, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average flame zone temperatures, combustion zone residence time, and description of method and location where the vent stream is introduced into the flame zone.

(dd) [61.356(f)(2)(i)(D)]
For a flare, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also consider the requirements specified in 40 CFR 60.18.

(ee) [61.356(f)(2)(i)(E)]
For a condenser, the design analysis shall consider the vent stream composition, constituent concentration, flow rate, relative humidity, and temperature. The design analysis shall also establish the design outlet organic compound concentration level or the design outlet benzene concentration level, design average temperature of the condenser exhaust vent stream, and the design average temperatures of the coolant fluid at the condenser inlet and outlet.

(ff) [61.356(f)(2)(i)(F)]
For a carbon adsorption system that regenerates the carbon bed directly on-site in the control device such as a fixed-bed adsorber, the design analysis shall consider the vent stream composition, constituent concentration, flow rate, relative humidity, and temperature. The design analysis shall also establish the design exhaust vent stream organic compound concentration level or the design exhaust vent stream benzene concentration level, number

and capacity of carbon beds, type and working capacity of activated carbon used for carbon beds, design total steam flow over the period of each complete carbon bed regeneration cycle, duration of the carbon bed steaming and cooling/drying cycles, design carbon bed temperature after regeneration, design carbon bed regeneration time, and design service life of carbon.

(gg) [61.356(f)(2)(i)(G)]
For a carbon adsorption system that does not regenerate the carbon bed directly on-site in the control device, such as a carbon canister, the design analysis shall consider the vent stream composition, constituent concentration, flow rate, relative humidity, and temperature. The design analysis shall also establish the design exhaust vent stream organic compound concentration level or the design exhaust vent stream benzene concentration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule.

(hh) [61.356(f)(2)(i)(H)]
For a control device subject to the requirements of 40 CFR 61.349(a)(2)(iv) [See section A.II], the design analysis shall consider the vent stream composition, constituent concentration, and flow rate. The design analysis shall also include all of the information submitted under 40 CFR 61.349(a)(2)(iv).

(c) [61.356(f)(3)]
If performance tests are used to determine control device performance in accordance with 40 CFR 61.349(c) [See section A.II.]:

(i) [61.356(f)(3)(i)]
A description of how it is determined that the test is conducted when the waste management unit or treatment process is operating at the highest load or capacity level. This description shall include the estimated or design flow rate and organic content of each vent stream and definition of the acceptable operating ranges of key process and control parameters during the test program.

(ii) [61.356(f)(3)(ii)]
A description of the control device including the type of control device, control device manufacturer's name and model number, control device dimensions, capacity, and construction materials.

(iii) [61.356(f)(3)(iii)]
A detailed description of sampling and monitoring procedures, including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis.

(iv) [61.356(f)(3)(iv)]
All test results.

vii. [61.356(g)]
The permittee shall maintain a record for each visual inspection required by 40 CFR 61.343 through 61.347 [See section A.III.] that identifies a problem (such as a broken seal, gap or other problem) which could result in benzene emissions. The record shall include the date of the inspection, waste management unit and control equipment location where the problem is identified, a description of the problem, a description of the corrective action taken, and the date the corrective action was completed.

viii. [61.356(h)]
A permittee shall maintain a record for each test of no detectable emissions required by 40 CFR 61.343 through 61.347 and 61.349 [See sections A.III.]. The record shall include the following information: date the test is performed, background level measured during test, and maximum concentration indicated by the instrument reading measured for each potential leak interface. If detectable emissions are measured at a leak interface, then the record shall also include the waste management unit, control equipment, and leak interface location where detectable emissions were measured, a description of the problem, a description of the corrective action taken, and the date the corrective action was completed.

ix. [61.356(i)]
For each treatment process and wastewater treatment system unit operated to comply with 40 CFR 61.348 [See section A.II.], the permittee shall maintain documentation that includes the following information regarding the unit operation:

(a) [61.356(i)(1)]
Dates of startup and shutdown of the unit.

(b) [61.356(i)(2)]
If measurements of waste stream benzene concentration are performed in accordance with 40 CFR 61.354(a)(1), the permittee shall maintain records that include date each test is performed and all test results.

(c) [61.356(i)(3)]
If a process parameter is continuously monitored in accordance with 40 CFR 61.354(a)(2), the permittee shall maintain records that include a description of the operating parameter (or parameters) to be monitored to

ensure that the unit will be operated in conformance with these standards and the unit's design specifications, and an explanation of the criteria used for selection of that parameter (or parameters) This documentation shall be kept for the life of the unit.

(d) [61.356(i)(4)]
If measurements of waste stream benzene concentration are performed in accordance with 40 CFR 61.354(b) [See section A.III.], the permittee shall maintain records that include the date each test is performed and all test results.

(e) [61.356(i)(5)]
Periods when the unit is not operated as designed.

x. [61.356(j)]
For each control device, the permittee shall maintain documentation that includes the following information regarding the control device operation:

(a) [61.356(j)(1)]
Dates of startup and shutdown of the closed-vent system and control device.

(b) [61.356(j)(2)]
A description of the operating parameter (or parameters) to be monitored to ensure that the control device will be operated in conformance with these standards and the control device's design specifications and an explanation of the criteria used for selection of that parameter (or parameters) This documentation shall be kept for the life of the control device.

(c) [61.356(j)(3)]
Periods when the closed-vent system and control device are not operated as designed including all periods and the duration when:

(i) [61.356(j)(3)(i)]
Any valve car-seal or closure mechanism required under 40 CFR 61.349(a)(1)(ii) [See section A.II.] is broken or the by-pass line valve position has changed.

(ii) [61.356(j)(3)(ii)]
The flow monitoring devices required under 40 CFR 61.349(a)(1)(ii) [See section A.II.] indicate that vapors are not routed to the control device as required.

(d) [61.356(j)(4)]
If a thermal vapor incinerator is used, then the permittee shall maintain continuous records of the temperature of the gas stream in the combustion

zone of the incinerator and records of all 3-hour periods of operation during which the average temperature of the gas stream in the combustion zone is more than 28°C below the design combustion zone temperature.

(e) [61.356(j)(5)]
If a catalytic vapor incinerator is used, then the permittee shall maintain continuous records of the temperature of the gas stream both upstream and downstream of the catalyst bed of the incinerator, records of all 3-hour periods of operation during which the average temperature measured before the catalyst bed is more than 28°C below the design gas stream temperature, and records of all 3-hour periods of operation during which the average temperature difference across the catalyst bed is less than 80 percent of the design temperature difference.

(f) [61.356(j)(6)]
If a boiler or process heater is used, then the permittee shall maintain records of each occurrence when there is a change in the location at which the vent stream is introduced into the flame zone as required by 40 CFR 61.349(a)(2)(i)(C) [See section A.II]. For a boiler or process heater having a design heat input capacity less than 44 MW (150 x $10^6$ Btu), the permittee shall maintain continuous records of the temperature of the gas stream in the combustion zone of the boiler or process heater and records of all 3-hour periods of operation during which the average temperature of the gas stream in the combustion zone is more than 28°C below the design combustion zone temperature. For a boiler or process heater having a design heat input capacity greater than or equal to 44 MW (150 x $10^6$ Btu), the permittee shall maintain continuous records of the parameter(s) monitored in accordance with the requirements of 40 CFR 61.354(c)(5) [See section A.III].

(g) [61.356(j)(7)]
If a flare is used, then the permittee shall maintain continuous records of the flare pilot flame monitoring and records of all periods during which the pilot flame is absent.

(h) [61.356(j)(8)]
If a condenser is used, then the permittee shall maintain records from the monitoring device of the parameters selected to be monitored in accordance with 40 CFR 61.354(c)(6) If concentration of organics or concentration of benzene in the control device outlet gas stream is monitored, then the permittee shall record all 3-hour periods of operation during which the concentration of organics or the concentration of benzene in the exhaust stream is more than 20 percent greater than the design value. If the temperature of the condenser exhaust stream and coolant fluid is monitored, then the permittee shall record all 3-hour periods of operation during which the temperature of the condenser exhaust vent stream is more than 6°C above the design average exhaust vent stream

temperature, or the temperature of the coolant fluid exiting the condenser is more than 6°C above the design average coolant fluid temperature at the condenser outlet.

(i) [61.356(j)(9)]
If a carbon adsorber is used, then the permittee shall maintain records from the monitoring device of the concentration of organics or the concentration of benzene in the control device outlet gas stream. If the concentration of organics or the concentration of benzene in the control device outlet gas stream is monitored, then the permittee shall record all 3-hour periods of operation during which the concentration of organics or the concentration of benzene in the exhaust stream is more than 20 percent greater than the design value. If the carbon bed regeneration interval is monitored, then the permittee shall record each occurrence when the vent stream continues to flow through the control device beyond the predetermined carbon bed regeneration time.

(j) [61.356(j)(10)]
If a carbon adsorber that is not regenerated directly on site in the control device is used, then the permittee shall maintain records of dates and times when the control device is monitored, when breakthrough is measured, and shall record the date and time then the existing carbon in the control device is replaced with fresh carbon.

(k) [61.356(j)(11)]
If an alternative operational or process parameter is monitored for a control device, as allowed in 40 CFR 61.354(e) , then the permittee shall maintain records of the continuously monitored parameter, including periods when the device is not operated as designed.

(l) [61.356(j)(12)]
If a control device subject to the requirements of 40 CFR 61.349(a)(2)(iv) [See section A.II] is used, then the permittee shall maintain records of the parameters that are monitored and each occurrence when the parameters monitored are outside the range of values specified in 40 CFR 61.349(a)(2)(iv)(C) [See section A.II], or other records as specified by the Administrator of U.S. EPA.

xi. [61.356(k)]
The permittee who elects to install and operate the control equipment in 40 CFR 61.351 [See section A.II.] shall comply with the record keeping requirements in 40 CFR 60.115b.

xii. [61.356(l)]
The permittee who elects to install and operate the control equipment in 40 CFR 61.352 [See section A.II] shall maintain records of the following:

(a) [61.356(l)(1)]
The date, location, and corrective action for each visual inspection required by 40 CFR 60.693-2(a)(5), during which a broken seal, gap, or other problem is identified that could result in benzene emissions.

(b) [61.356(l)(2)]
Results of the seal gap measurements required by 40 CFR 60.693-2(a).

xiii. [61.356(m)]
If a system is used for emission control that is maintained at a pressure less than atmospheric pressure with openings to provide dilution air, then the permittee shall maintain records of the monitoring device and records of all periods during which the pressure in the unit is operated at a pressure that is equal to or greater than atmospheric pressure.

xiv. [61.356(n)
The permittee using a total enclosure to comply with control requirements for tanks in 40 CFR 61.343 or the control requirements for containers in 40 CFR 61.345 must keep the records required in paragraphs (n)(1) and (2) of 40 CFR 61.356. The permittee may use records as required in 40 CFR 264.1089(b)(2)(iv) or 40 CFR 265.1090(b)(2)(iv) for a tank or as required in 40 CFR 264.1089(d)(1) or 40 CFR 265.1090(d)(1) for a container to meet the record keeping requirement in 40 CFR 61.356(n)(1) The permittee must make the records of each verification of a total enclosure available for inspection upon request.

(a) [61.356(n)(1)]
Records of the most recent set of calculations and measurements performed to verify that the enclosure meets the criteria of a permanent total enclosure as specified in "Procedure T - Criteria for and Verification of a Permanent or Temporary Total Enclosure" in 40 CFR 52.741, Appendix B;

(b) [61.356(n)(2)]
Records required for a closed-vent system and control device according to the requirements in paragraphs (d)(f), and (j) of 40 CFR 61.356.

3. Monitoring Requirement for OAC rule 3745-21-09

a. [OAC rule 3745-21-09(M)(2)]
Except for any wastewater separator which is used solely for once-through, noncontact cooling water or for intermittent tank farm drainage resulting from accumulated precipitation, the permittee shall check all covers and forebay and separator sections by visual inspections quarterly to ensure that they are equipped with lids and seals that are kept in a closed position at all times except when in actual use.

b. [OAC rule 3745-21-09(UU)(4)]

The permittee shall collect and record the following information each day: the operating times for the capture (collection) system, control device, and the crude desalter.

4. 40 CFR Part 60, Subpart QQQ

a. [60.692-2] STANDARDS: Individual Drain Systems

i. [60.692-2(a)(2)]
Each drain in active service shall be checked by visual or physical inspection initially and monthly thereafter for indications of low water levels or other conditions that would reduce the effectiveness of the water seal controls.

ii. [60.692-2(a)(3)]
Except as provided in 40 CFR 60.692-3(a)(4), each drain out of active service shall be checked by visual or physical inspection initially and weekly thereafter for indications of low water levels or other problems that could result in VOC emissions.

iii. [60.692-2(a)(4)]
As an alternative to the requirements in 40 CFR 60.692-3(a)(3), if the permittee elects to install a tightly sealed cap or plug over a drain that is out of service, inspections shall be conducted initially and semiannually to ensure caps or plugs are in place and properly installed.

iv. [60.692-2(a)(5)]
Whenever low water levels or missing or improperly installed caps or plugs are identified, water shall be added or first efforts at repair shall be made as soon as practicable, but not later than 24 hours after detection, except as provided in 40 CFR 60.692-6.

v. [60.692-2(b)(3)]
Junction boxes shall be visually inspected initially and semiannually thereafter to ensure that the cover is in place and to ensure that the cover has a tight seal around the edge.

vi. [60.692-2(b)(4)]
If a broken seal or gap is identified, first effort at repair shall be made as soon as practicable, but not later than 15 calendar days after the broken seal or gap is identified, except as provided in 40 CFR 60.692-6.

vii. [60.692-2(c)(2)]
The portion of each unburied sewer line shall be visually inspected initially and semiannually thereafter for indication of cracks, gaps, or other problems that could result in VOC emissions.

viii. [60.692-2(c)(3)]

Whenever cracks, gaps, or other problems are detected, repairs shall be made as soon as practicable, but not later than 15 calendar days after identification, except as provided in 40 CFR 60.692-6.

b. [60.692] Standards: Oil-water separators

i. [60.692-3(a)(4)]
Roof seals, access doors, and other openings shall be checked by visual inspection initially and semiannually thereafter to ensure that no cracks or gaps occur between the roof and wall and that access doors and other openings are closed and gasketed properly.

ii. [60.692-3(a)(5)]
When a broken seal or gasket or other problem is identified, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after it is identified, except as provided in 40 CFR 60.692-6.

c. [60.692-6] Standards: Delay of repair

i. [60.692-6(a)]
Delay of repair of facilities that are subject to the provisions of this subpart will be allowed if the repair is technically impossible without a complete or partial refinery or process unit shutdown.

ii. [60.692-6(b)]
Repair of such equipment shall occur before the end of the next refinery or process unit shutdown.

d. [60.693-1] Alternative standards for individual drain systems

i. [60.693-1(e)(2)]
The portion of each unburied sewer line shall be visually inspected initially and semiannually thereafter for indication of cracks, gaps, or other problems that could result in VOC emissions.

ii. [60.693-1(e)(3)]
Whenever cracks, gaps, or other problems are detected, repairs shall be made as soon as practicable, but not later than 15 calendar days after identification, except as provided in 40 CFR 60.692-6.

e. [60.693-2] Alternative standards for oil-water separators

i. [60.693-2(a)(1)(iii)]
The maximum gap width and total gap area shall be determined by the methods and procedures specified in 40 CFR 60.696(d) [See section A.V].

(a) [60.693-2(a)(1)(iii)(A)]

Measurement of primary seal gaps shall be performed within 60 calendar days after initial installation of the floating roof and introduction of refinery wastewater and once every 5 years thereafter.

(bb) [60.693-2(a)(1)(iii)(B)]
Measurement of secondary seal gaps shall be performed within 60 calendar days of initial introduction of refinery wastewater and once every year thereafter.

ii. [60.693-2(a)(1)(iv)]
The permittee shall make necessary repairs within 30 calendar days of identification of seals not meeting the requirements listed in paragraphs (a)(1) (i) and (ii) of 40 CFR 60.693-2.

iii. [60.693-2(a)(5)]
Access doors and other openings shall be visually inspected initially and semiannually thereafter to ensure that there is a tight fit around the edges and to identify other problems that could result in VOC emissions.

iv. [60.693-2(a)(5)(ii)]
When a broken seal or gasket on an access door or other opening is identified, it shall be repaired as soon as practicable, but not later than 30 calendar days after it is identified, except as provided in 40 CFR 60.692-6.

f. [60.695] Monitoring of operations

i. [60.695(a)]
The permittee shall install, calibrate, maintain, and operate according to manufacturer's specifications the following equipment, unless alternative monitoring procedures or requirements are approved for that facility by the Administrator.

(a) [60.695(a)(1)]
Where a thermal incinerator is used for VOC emission reduction, a temperature monitoring device equipped with a continuous recorder shall be used to measure the temperature of the gas stream in the combustion zone of the incinerator. The temperature monitoring device shall have an accuracy of ±1 percent of the temperature being measured, expressed in °C, or ±0.5 °C (0.9 °F), whichever is greater.

(b) [60.695(a)(2)]
Where a catalytic incinerator is used for VOC emission reduction, temperature monitoring devices, each equipped with a continuous recorder shall be used to measure the temperature in the gas stream immediately before and after the catalyst bed of the incinerator. The temperature monitoring devices shall have an accuracy of ±1 percent of the

temperature being measured, expressed in °C, or ±0.5 °C (0.9 °F), whichever is greater.

(c) [60.695(a)(3)]
Where a carbon adsorber is used for VOC emissions reduction, a monitoring device that continuously indicates and records the VOC concentration level or reading of organics in the exhaust gases of the control device outlet gas stream or inlet and outlet gas stream shall be used.

(i) [60.695(a)(3)(i)]
For a carbon adsorption system that regenerates the carbon bed directly onsite, a monitoring device that continuously indicates and records the volatile organic compound concentration level or reading of organics in the exhaust gases of the control device outlet gas stream or inlet and outlet gas stream shall be used.

(ii) [60.695(a)(3)(ii)]
For a carbon adsorption system that does not regenerate the carbon bed directly onsite in the control device (e.g., a carbon canister), the concentration level of the organic compounds in the exhaust vent stream from the carbon adsorption system shall be monitored on a regular schedule, and the existing carbon shall be replaced with fresh carbon immediately when carbon breakthrough is indicated. The device shall be monitored on a daily basis or at intervals no greater than 20 percent of the design carbon replacement interval, whichever is greater. As an alternative to conducting this monitoring, the permittee may replace the carbon in the carbon adsorption system with fresh carbon at a regular predetermined time interval that is less than the carbon replacement interval that is determined by the maximum design flow rate and organic concentration in the gas stream vented to the carbon adsorption system.

(d) [60.695(a)(4)]
Where a flare is used for VOC emission reduction, the permittee shall comply with the monitoring requirements of 40 CFR 60.18(f)(2)

ii. [60.695(b)]
Where a VOC recovery device other than a carbon adsorber is used to meet the requirements specified in 40 CFR 60.692-5(a), the permittee shall provide to the Administrator information describing the operation of the control device and the process parameter(s) that would indicate proper operation and maintenance of the device. The Administrator may request further information and will specify appropriate monitoring procedures or requirements.

iii. [60.695(c)]

An alternative operational or process parameter may be monitored if it can be demonstrated that another parameter will ensure that the control device is operated in conformance with these standards and the control device's design specifications.

g. [60.697] Record keeping requirements 40 CFR Part 60, Subpart QQQ

i. [60.697(a)]
Each permittee of a facility subject to the provisions of 40 CFR Part 60, Subpart QQQ shall comply with the record keeping requirements of 40 CFR 60.697. All records shall be retained for a period of 2 years after being recorded unless otherwise noted.

ii. [60.697(b)(1)]
For individual drain systems subject to 40 CFR 60.692-2 [See section A.II], the location, date, and corrective action shall be recorded for each drain when the water seal is dry or otherwise breached, when a drain cap or plug is missing or improperly installed, or other problem is identified that could result in VOC emissions, as determined during the initial and periodic visual or physical inspection.

iii. [60.697(b)(2)]
For junction boxes subject to 40 CFR 60.692-2 [See section A.II], the location, date, and corrective action shall be recorded for inspections required by 40 CFR 60.692-2(b) [See section A.III] when a broken seal, gap, or other problem is identified that could result in VOC emissions.

iv. [60.697(b)(3)]
For sewer lines subject to 40 CFR 60.692-2 and 60.693-1(e) [See section A.II], the location, date, and corrective action shall be recorded for inspections required by 40 CFR 60.692-2(c) and 60.693-1(e) [See section A.III] when a problem is identified that could result in VOC emissions.

v. [60.697(c)]
For oil-water separators subject to 40 CFR 60.692-3 [See section A.II], the location, date, and corrective action shall be recorded for inspections required by 40 CFR 60.692-3(a) [See section A.III] when a problem is identified that could result in VOC emissions.

vi. [60.697(d)]
For closed vent systems subject to 40 CFR 60.692-5 [See section A.II] and completely closed drain systems subject to 40 CFR 60.693-1[See section A.II], the location, date, and corrective action shall be recorded for inspections required by 40 CFR 60.692-5(e) [See section A.III] during which detectable emissions are measured or a problem is identified that could result in VOC emissions.

vii. [60.697(e)(1)]

If an emission point cannot be repaired or corrected without a process unit shutdown, the expected date of a successful repair shall be recorded.

(a) [60.697(e)(2)]
The reason for the delay as specified in 40 CFR 60.692-6 [See section A.III] shall be recorded if an emission point or equipment problem is not repaired or corrected in the specified amount of time.

(b) [60.697(e)(3)]
The signature of the permittee (or designee) whose decision it was that repair could not be effected without refinery or process shutdown shall be recorded.

(c) [60.697(e)(4)]
The date of successful repair or corrective action shall be recorded.

viii. [60.697(f)]
A copy of the design specifications for all equipment used to comply with the provisions of this subpart shall be kept for the life of the source in a readily accessible location.

ix. [60.697(f)(2)]
The following information pertaining to the design specifications shall be kept.

(a) [60.697(f)(2)(i)]
Detailed schematics, and piping and instrumentation diagrams.

(b) [60.697(f)(2)(ii)]
The dates and descriptions of any changes in the design specifications.

(c) [60.697(f)(3)]
The following information pertaining to the operation and maintenance of closed drain systems and closed vent systems shall be kept in a readily accessible location.

(i) [60.697(f)(3)(i)]
Documentation demonstrating that the control device will achieve the required control efficiency during maximum loading conditions shall be kept for the life of the facility. This documentation is to include a general description of the gas streams that enter the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816°C (1,500°F) is used to meet the 95-percent requirement, documentation that those conditions exist is sufficient to meet the requirements of this paragraph.

(ii) [60.697(f)(3)(ii)]
A description of the operating parameter (or parameters) to be monitored to ensure that the control device will be operated in conformance with these standards and the control device's design specifications and an explanation of the criteria used for selection of that parameter (or parameters) shall be kept for the life of the facility.

(iii) [60.697(f)(3)(iii)]
Periods when the closed vent systems and control devices required in 40 CFR 60.692 [See section A.II] are not operated as designed, including periods when a flare pilot does not have a flame shall be recorded and kept for 2 years after the information is recorded.

(iv) [60.697(f)(3)(iv)]
Dates of startup and shutdown of the closed vent system and control devices required in 40 CFR 60.692 shall be recorded and kept for 2 years after the information is recorded.

(v) [60.697(f)(3)(v)]
The dates of each measurement of detectable emissions required in 40 CFR 60.692, 60.693, or 60.692-5 shall be recorded and kept for 2 years after the information is recorded.

(vi) [60.697(f)(3)(vi)]
The background level measured during each detectable emissions measurement shall be recorded and kept for 2 years after the information is recorded.

(vii) [60.697(f)(3)(vii)]
The maximum instrument reading measured during each detectable emission measurement shall be recorded and kept for 2 years after the information is recorded.

(viii) [60.697(f)(3)(viii)]
Each permittee of an affected facility that uses a thermal incinerator shall maintain continuous records of the temperature of the gas stream in the combustion zone of the incinerator and records of all 3-hour periods of operation during which the average temperature of the gas stream in the combustion zone is more than 28°C below the design combustion zone temperature, and shall keep such records for 2 years after the information is recorded.

(ix) [60.697(f)(3)(ix)]
Each permittee of an affected facility that uses a catalytic incinerator shall maintain continuous records of the temperature of the gas stream both upstream and downstream of the catalyst bed

of the incinerator, records of all 3-hour periods of operation during which the average temperature measured before the catalyst bed is more than 28°C below the design gas stream temperature, and records of all 3-hour periods during which the average temperature difference across the catalyst bed is less than 80 percent of the design temperature difference, and shall keep such records for 2 years after the information is recorded.

(x) [60.697(f)(3)(x)]
Each permittee of an affected facility that uses a carbon adsorber shall maintain continuous records of the VOC concentration level or reading of organics of the control device outlet gas stream or inlet and outlet gas stream and records of all 3-hour periods of operation during which the average VOC concentration level or reading of organics in the exhaust gases, or inlet and outlet gas stream, is more than 20 percent greater than the design exhaust gas concentration level, and shall keep such records for 2 years after the information is recorded.

x. [60.697(g)]
If the permittee elects to install a tightly sealed cap or plug over a drain that is out of active service, the permittee shall keep for the life of a facility in a readily accessible location, plans or specifications which indicate the location of such drains.

xi. [60.697(h)]
For stormwater sewer systems subject to the exclusion in 40 CFR 60.692-1(d)(1) [See section A.II], the permittee shall keep for the life of the facility in a readily accessible location, plans or specifications which demonstrate that no wastewater from any process units or equipment is directly discharged to the stormwater sewer system.

xii. [60.697(i)]
For ancillary equipment subject to the exclusion in 40 CFR 60.692-1(d)(2) [See section A.II], the permittee shall keep for the life of a facility in a readily accessible location, plans or specifications which demonstrate that the ancillary equipment does not come in contact with or store oily wastewater.

xiii. [60.697(j)]
For non-contact cooling water systems subject to the exclusion in 40 CFR 60.692-1(d)(3) [See section A.II], the permittee shall keep for the life of the facility in a readily accessible location, plans or specifications which demonstrate that the cooling water does not contact hydrocarbons or oily wastewater and is not recirculated through a cooling tower.

xiv. [60.697(k)]

For oil-water separators subject to 40 CFR 60.693-2 See section A.II], the location, date, and corrective action shall be recorded for inspections required by 40 CFR 60.693-2(a)(1)(iii)(A) and (B) [See section A.III], and shall be maintained for the time period specified in paragraphs (k)(1) and (2) 40 CFR 60.697.

(a) [60.697(k)(1)]
For inspections required by 40 CFR 60.693-2(a)(1)(iii)(A) [See section A.III], ten years after the information is recorded.

(b) [60.697(k)(2)]
For inspections required by 40 CFR 60.693-2(a)(1)(iii)(B) [See section A.III], two years after the information is recorded.

6. General Record Keeping Requirements
The permittee shall maintain files of all information (including all reports and notifications) required by this permit recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

## IV. Reporting Requirements

1. 40 CFR Part 63, Subpart CC

a. [63.654(a)]
The permittee subject to the wastewater provisions in 40 CFR 63.647 [See section A.II.] shall comply with the record keeping and reporting provisions in 40 CFR 61.356 and 61.357 of 40 CFR Part 61, Subpart FF [See sections A.III. and A.IV.] unless the permittee is complying with the wastewater provisions specified in paragraph (o)(2)(ii) of 40 CFR 63.640 [See section A.I.2.]. There are no additional reporting and record keeping requirements for wastewater under 40 CFR Part 63, Subpart CC unless a wastewater stream is included in an emissions average.

b. Miscellaneous Process Vents
See the applicable sections in Part II for miscellaneous process vents in A.IV., referencing 40 CFR Part 63, Subpart CC.

2. [61.357] REPORTING REQUIREMENTS - 40 CFR Part 61, Subpart FF - National Emission Standard for Benzene Waste Operations

a. [61.357(a)]
The permittee shall submit to the Administrator by the initial startup for a new source, a report that summarizes the regulatory status of each waste stream subject to 40 CFR 61.342 [See section A.II.] and is determined by the procedures specified in 40 CFR

61.355(c) [See section A.V.] to contain benzene. The report shall include the following information:

i. [61.357(a)(1)]
Total annual benzene quantity from facility waste determined in accordance with 40 CFR 61.355(a) [See section A.V.].

ii. [61.357(a)(2)]
A table identifying each waste stream and whether or not the waste stream will be controlled for benzene emissions in accordance with the requirements 40 CFR Part 61, Subpart FF.

iii. [61.357(a)(3)]
For each waste stream identified as not being controlled for benzene emissions in accordance with the requirements of 40 CFR Part 61, Subpart FF, the following information shall be added to the table:

(a) [61.357(a)(3)(i)]
Whether or not the water content of the waste stream is greater than 10 percent;

(b) [61.357(a)(3)(ii)]
Whether or not the waste stream is a process wastewater stream, product tank drawdown, or landfill leachate;

(c) [61.357(a)(3)(iii)]
Annual waste quantity for the waste stream;

(d) [61.357(a)(3)(iv)]
Range of benzene concentrations for the waste stream;

(e) [61.357(a)(3)(v)]
Annual average flow-weighted benzene concentration for the waste stream; and

(f) [61.357(a)(3)(vi)]
Annual benzene quantity for the waste stream.

iv. [61.357(a)(4)]
The information required in paragraphs 40 CFR 61.357(a)(1), (2), and (3) should represent the waste stream characteristics based on current configuration and operating conditions. The permittee only needs to list in the report those waste streams that contact materials containing benzene. The report does not need to include a description of the controls to be installed to comply with the standard or other information required in 40 CFR 61.10(a) of Subpart A.

b. [61.357(b)]
If the total annual benzene quantity from facility waste is less than 1 Mg/yr (1.1 ton/yr), then the permittee shall submit a report to the Administrator a report that updates the information listed in paragraphs (a)(1) through (a)(3) of 40 CFR 61.357 whenever there is a change in the process generating the waste stream that could cause the total annual benzene quantity from facility waste to increase to 1 Mg/yr (1.1 ton/yr) or more.

c. [61.357(c)]
If the total annual benzene quantity from facility waste is less than 10 Mg/yr (11 ton/yr) but is equal to or greater than 1 Mg/yr (1.1 ton/yr), then the permittee shall submit to the Administrator a report that updates the information listed in paragraphs (a)(1) through (a)(3) of 40 CFR 61.357. The report shall be submitted annually and whenever there is a change in the process generating the waste stream that could cause the total annual benzene quantity from facility waste to increase to 10 Mg/yr (11 ton/yr) or more. If the information in the annual report required by paragraphs (a)(1) through (a)(3) of 40 CFR 61.357 is not changed in the following year, the permittee may submit a statement to that effect.

d. [61.357(d)]
If the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr (11 tons/yr), then the permittee shall submit to the Administrator the following reports:

i. [61.357(d)(1)]
By the date of initial startup for a new source, a certification that the equipment necessary to comply with these standards has been installed and that the required initial inspections or tests have been carried out in accordance with this subpart.

ii. [61.357(d)(2)]
By December 30 of each year, the permittee shall submit annually to the Administrator, a report that updates the information listed in 40 CFR 61.357(a)(1) through (a)(3) If the information in the annual report required by 40 CFR 61.357(a)(1) through (a)(3) is not changed in the following year, the permittee may submit a statement to that effect.

iii. [61.357(d)(3)]
If the permittee elects to comply with the requirements of 40 CFR 61.342(c)(3)(ii) [See section A.II.], then the report required by 40 CFR 61.342(d)(2) [See section A.IV] shall include a table identifying each waste stream chosen for exemption and the total annual benzene quantity in these exempted streams.

iv. [61.357(d)(4)]
If the permittee elects to comply with the alternative requirements of 40 CFR 61.342(d), then the permittee shall include in the report required by paragraph (d)(2) of 40 CFR 61.357 a table presenting the following information for each process wastewater stream:

(a) [61.357(d)(4)(i)]
Whether or not the process wastewater stream is being controlled for benzene emissions in accordance with the requirements of 40 CFR Part 61, Subpart FF;

(b) [61.357(d)(4)(ii)]

For each process wastewater stream identified as not being controlled for benzene emissions in accordance with the requirements of 40 CFR Part 61, Subpart FF, the table shall report the following information for the process wastewater stream as determined at the point of waste generation: annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity;

(c) 40 CFR 61.357(d)(4)(iii)
For each process wastewater stream identified as being controlled for benzene emissions in accordance with the requirements of 40 CFR Part 61, Subpart FF, the table shall report the following information for the process wastewater stream as determined at the exit to the treatment process: Annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.

v. [61.357(d)(5)]
If the permittee elects to comply with the alternative requirements of 40 CFR 61.342(e), then the report required by paragraph (d)(2) of 40 CFR 61.357 shall include a table presenting the following information for each waste stream:

(a) [61.357(d)(5)(i)]
For each waste stream identified as not being controlled for benzene emissions in accordance with the requirements of 40 CFR Part 61, Subpart FF; the table shall report the following information for the waste stream as determined at the point of waste generation: annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity;

(b) 40 CFR 61.357(d)(5)(ii)
For each waste stream identified as being controlled for benzene emissions in accordance with the requirements of 40 CFR Part 61, Subpart FF; the table shall report the following information for the waste stream as determined at the applicable location described in 40 CFR 61.355(k)(2): Annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.

vi. [61.357(d)(6)]
The permittee shall submit quarterly by March 30, June 30, September 30, and December 30 to the Administrator a certification that all of the required inspections have been carried out in accordance with the requirements of 40 CFR Part 61, Subpart FF.

vii. [61.357(d)(7)]
The permittee shall submit quarterly by March 30, June 30, September 30, and December 30 to the Administrator that includes:

(a) [61.357(d)(7)(i)]
If a treatment process or wastewater treatment system unit is monitored in accordance with 40 CFR 61.354(a)(1) [See section A.III], then each period of operation during which the concentration of benzene in the monitored waste stream exiting the unit is equal to or greater than 10 ppmw.

(b) [61.357(d)(7)(ii)]
If a treatment process or wastewater treatment system unit is monitored in accordance with 40 CFR 61.354(a)(2) [See section A.III], then each 3-hour period of operation during which the average value of the monitored parameter is outside the range of acceptable values or during which the unit is not operating as designed.

(c) [61.357(d)(7)(iii)]
If a treatment process or wastewater treatment system unit is monitored in accordance with 40 CFR 61.354(b) [See section A.III.], then each period of operation during which the flow-weighted annual average concentration of benzene in the monitored waste stream entering the unit is equal to or greater than 10 ppmw and/or the total annual benzene quantity is equal to or greater than 1.0 mg/yr (1.1 ton/yr).

(d) [61.357(d)(7)(iv)]
For a control device monitored in accordance with 40 CFR 61.354(c) [See section A.III], each period of operation monitored during which any of the following conditions occur, as applicable to the control device:

(i) [61.357(d)(7)(iv)(A)]
Each 3-hour period of operation during which the average temperature of the gas stream in the combustion zone of a thermal vapor incinerator, as measured by the temperature monitoring device, is more than 28°C below the design combustion zone temperature.

(ii) [61.357(d)(7)(iv)(B)]
Each 3-hour period of operation during which the average temperature of the gas stream immediately before the catalyst bed of a catalytic vapor incinerator, as measured by the temperature monitoring device, is more than 28°C below the design gas stream temperature, and any 3-hour period during which the average temperature difference across the catalyst bed (i.e., the difference between the temperatures of the gas stream immediately before and after the catalyst bed), as measured by the temperature monitoring device, is less than 80 percent of the design temperature difference.

(iii) [61.357(d)(7)(iv)(C)]
Each 3-hour period of operation during which the average temperature of the gas stream in the combustion zone of a boiler or

process heater having a design heat input capacity less than 44 MW (150 x $10^6$ Btu), as measured by the temperature monitoring device, is more than 28°C below the design combustion zone temperature.

(iv) [61.357(d)(7)(iv)(D)]
Each 3-hour period of operation during which the average concentration of organics or the average concentration of benzene in the exhaust gases from a carbon adsorber, condenser, or other vapor recovery system is more than 20 percent greater than the design concentration level of organics or benzene in the exhaust gas.

(v) [61.357(d)(7)(iv)(E)]
Each 3-hour period of operation during which the temperature of the condenser exhaust vent stream is more than 6°C above the design average exhaust vent stream temperature, or the temperature of the coolant fluid exiting the condenser is more than 6°C above the design average coolant fluid temperature at the condenser outlet.

(vi) [61.357(d)(7)(iv)(F)]
Each period in which the pilot flame of a flare is absent.

(vii) [61.357(d)(7)(iv)(G)]
Each occurrence when there is a change in the location at which the vent stream is introduced into the flame zone of a boiler or process heater as required by 40 CFR 61.349(a)(2)(i)(C) [See section A.II].

(viii) [61.357(d)(7)(iv)(H)]
Each occurrence when the carbon in a carbon adsorber system that is regenerated directly on site in the control device is not regenerated at the predetermined carbon bed regeneration time.

(ix) [61.357(d)(7)(iv)(I)]
Each occurrence when the carbon in a carbon adsorber system that is not regenerated directly on site in the control device is not replaced at the predetermined interval specified in 40 CFR 61.354(c) [See section A.III].

(x) [61.357(d)(7)(iv)(J)]
Each 3-hour period of operation during which the parameters monitored are outside the range of values specified in 40 CFR 61.349(a)(2)(iv)(C) [See section A.II], or any other periods specified by the Administrator of U.S. EPA for a control device subject to the requirements of 40 CFR 61.349(a)(2)(iv).

(e) [61.357(d)(7)(v)]
For a cover and closed-vent system monitored in accordance with 40 CFR 61.354(g), the permittee shall submit a report quarterly by March 30, June 30, September 30, and December 30 quarterly to the Administrator that identifies any period in which the pressure in the waste management unit is equal to or greater than atmospheric pressure.

viii. [61.357(d)(8)]
By December 30 of each year, the permittee shall submit annually to the Administrator a report that summarizes all inspections required by 40 CFR 61.342 through 61.354 [See section A.III.] during which detectable emissions are measured or a problem (such as a broken seal, gap or other problem) that could result in benzene emissions is identified, including information about the repairs or corrective action taken.

e. [61.357(e)]
The permittee electing to comply with the provisions of 40 CFR 61.351 [See section A.II.] or 40 CFR 61.352 shall notify the Administrator of the alternative standard selected in the report required under 40 CFR 61.07 or 61.10.

f. [61.357(f)]
The permittee who elects to install and operate the control equipment in 61.351 [See section A.II.] shall comply with the reporting requirements in 40 CFR 60.115b.

g. [61.367(g)]
If the permittee elects to install and operate the control equipment in 40 CFR 61.352 [See section A.II], then the permittee shall submit initial and quarterly reports that identify all seal gap measurements, as required in 40 CFR 60.693-2(a) [See section A.III], that are outside the prescribed limits.

3. Deviation Reporting Requirements for OAC rule 3745-21-09

a. [OAC rule 3745-21-09(M)(2)]
Except for any wastewater separator which is used solely for once-through, noncontact cooling water or for intermittent tank farm drainage resulting from accumulated precipitation, the permittee shall submit deviation (excursion reports) that identify all occurrences where covers, forebay and other separator sections were not equipped with lids, seals, or kept in a closed position except when in actual use., the permittee shall check all covers and forebay and separator sections by visual inspections quarterly to ensure that they are equipped with lids and seals that are kept in a closed position at all times except when in actual use. These reports shall be submitted quarterly to the Toledo Division of Environmental Services by January 30, April 30, July 30 and October 30 of each year and shall cover the previous calendar quarter. If no deviations occurred during the quarter the permittee shall submit a statement that no deviations occurred during the calendar quarter.

b. [OAC rule 3745-21-09(UU)(4)]

The permittee shall submit semi-annual deviation (excursion) reports of: any periods in which the capture (collection) system and/or control device was not in operation while the crude desalter was in operation.

If no deviations occurred during the six-month period, then the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

These reports shall be submitted semi-annually i.e., by January 30 and July 30 of each year, and shall cover the previous six calendar months.

4. [60.698] Reporting requirements - 40 CFR Part 60, Subpart QQQ

a. [60.698(a)]
The permittee electing to comply with the provisions of 40 CFR 60.693 shall notify the Administrator of the alternative standard selected in the report required in 40 CFR 60.7.

b. [60.698(b)]
The permittee shall submit to the Administrator within 60 days after initial startup a certification that the equipment necessary to comply with these standards has been installed and that the required initial inspections or tests of process drains, sewer lines, junction boxes, oil-water separators, and closed vent systems and control devices have been carried out in accordance with these standards. Thereafter, the permittee shall submit to the Administrator semiannually a certification that all of the required inspections have been carried out in accordance with these standards.

c. [60.698(b)(2)]
The permittee of an affected facility that uses a flare shall submit to the Administrator within 60 days after initial startup, as required under 40 CFR 60.8(a), a report of the results of the performance test required in 40 CFR 60.696(c) [See section A.V].

d. [60.698(c)]
A report that summarizes all inspections when a water seal was dry or otherwise breached, when a drain cap or plug was missing or improperly installed, or when cracks, gaps, or other problems were identified that could result in VOC emissions, including information about the repairs or corrective action taken, shall be submitted initially and semiannually thereafter to the Administrator.

e. [60.698(d)]
As applicable, a report shall be submitted semiannually to the Administrator that indicates:

i. [60.698(d)(1)]
Each 3-hour period of operation during which the average temperature of the gas stream in the combustion zone of a thermal incinerator, as measured by the temperature monitoring device, is more than 28°C below the design combustion zone temperature;

ii. [60.698(d)(2)]
Each 3-hour period of operation during which the average temperature of the gas stream immediately before the catalyst bed of a catalytic incinerator, as measured by the temperature monitoring device, is more than 28°C below the design gas stream temperature, and any 3-hour period during which the average temperature difference across the catalyst bed (i.e., the difference between the temperatures of the gas stream immediately before and after the catalyst bed), as measured by the temperature monitoring device, is less than 80 percent of the design temperature difference; or

iii. [60.698(d)(3)]
Each 3-hour period of operation during which the average VOC concentration level or reading of organics in the exhaust gases from a carbon adsorber is more than 20 percent greater than the design exhaust gas concentration level or reading.

f. [60.698(e)]
If compliance with the provisions of this subpart is delayed pursuant to 40 CFR 60.692-7 [See section A.II], the notification required under 40 CFR 60.7(a)(4) shall include the estimated date of the next scheduled refinery or process unit shutdown after the date of notification and the reason why compliance with the standards is technically impossible without a refinery or process unit shutdown.

5. General Reporting Requirements

a. All requests, reports, applications, submittals, and other communications pursuant to this permit shall be submitted to: Toledo Division of Environmental Services, Air Resources Section, 348 South Erie Street, Toledo, Ohio 43602-1633.

b. All requests, reports, applications, submittals, and other communications to the Administrator pursuant to this permit shall be submitted to: Toledo Division of Environmental Services; and, Director Ohio EPA c/o Bob Hodanbosi, Ohio EPA, Lazarus Government Center, P.O. Box 1049, Columbus, OH 43216-1049.

c. If any State requires a submittal that contains all the information required in an application, notification, request, report, statement, or other communication required in 40 CFR Part 63, the permittee may send the appropriate Regional Office of the EPA a copy of that submittal to satisfy the requirements of 40 CFR Part 63 for that communication.

If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

## V. Testing Requirements

1. Miscellaneous Process Vents
See the applicable sections in Part II for miscellaneous process vents in A.V., referencing 40 CFR Part 63, Subpart CC.

2. [61.342(g)] COMPLIANCE WITH GENERAL STANDARDS - 40 CFR Part 61, Subpart FF
Compliance with this subpart will be determined by review of facility records and results from tests and inspections using methods and procedures specified in 40 CFR 61.355 [See section A.V.].

3. [61.355] TEST METHODS, PROCEDURES, AND COMPLIANCE PROVISIONS - 40 CFR Part 61, Subpart FF - National Emission Standard for Benzene Waste Operations

   a. [61.355(a)]
   The permittee shall determine the total annual benzene quantity from facility waste by the following procedure:

      i. [61.355(a)(1)]
      For each waste stream subject to this subpart having a flow-weighted annual average water content greater than 10 percent water, on a volume basis as total water, or is mixed with water or other wastes at any time and the resulting mixture has an annual average water content greater than 10 percent as specified in 40 CFR 61.342(a) [See section A.II.], the permittee shall:
         (a) [61.355(a)(1)(i)]
         Determine the annual waste quantity for each waste stream using the procedures specified in 40 CFR 61.355(b).
         (b) [61.355(a)(1)(ii)]
         Determine the flow-weighted annual average benzene concentration for each waste stream using the procedures specified in 40 CFR 61.355(c).
         (c) [61.355(a)(1)(iii)]
         Calculate the annual benzene quantity for each waste stream by multiplying the annual waste quantity of the waste stream times the flow-weighted annual average benzene concentration.

      ii. [61.355(a)(2)]
      Total annual benzene quantity from facility waste is calculated by adding together the annual benzene quantity for each waste stream generated during the year and the annual benzene quantity for each process unit turnaround waste annualized according to 40 CFR 61.355(b)(4).

      iii. [61.355(a)(3)]
      The permittee shall comply with the requirements of 40 CFR 61.342(c) , 40 CFR 61.342(d) , or (e) [See section A.II.].

      iv. [61.355(a)(4)]
      If the total annual benzene quantity from facility waste is less than 10 Mg/yr (11 ton/yr) but is equal to or greater than 1 Mg/yr (1.1 ton/yr), then the permittee shall:

         (a) [61.355(a)(4)(i)]
         Comply with the record keeping requirements of 40 CFR 61.356 and reporting requirements of 40 CFR 61.357 [See sections A.III and A.IV]; and

(b) [61.355(a)(4)(ii)]
Repeat the determination of total annual benzene quantity from facility waste at least once per year and whenever there is a change in the process generating the waste that could cause the total annual benzene quantity from facility waste to increase to 10 Mg/yr (11 ton/yr) or more.

v. [61.355(a)(5)]
If the total annual benzene quantity from facility waste is less than 1 Mg/yr (1.1 ton/yr), then the permittee shall:

(a) [61.355(a)(5)(i)]
Comply with the record keeping requirements of 40 CFR 61.356 and reporting requirements of 40 CFR 61.357 [See sections A.III and A.IV]; and

(b) [61.355(a)(5)(ii)]
Repeat the determination of total annual benzene quantity from facility waste whenever there is a change in the process generating the waste that could cause the total annual benzene quantity from facility waste to increase to 1 Mg/yr (1.1 ton/yr) or more.

vi. [61.355(a)(6)]
The benzene quantity in a waste stream that is generated less than one time per year, except as provided for process unit turnaround waste in paragraph (b)(4) of 40 CFR 61.355, shall be included in the determination of total annual benzene quantity from facility waste for the year in which the waste is generated unless the waste stream is otherwise excluded from the determination of total annual benzene quantity from facility waste in accordance with paragraphs (a) through (c) of 40 CFR 61.355. The benzene quantity in this waste stream shall not be annualized or averaged over the time interval between the activities that resulted in generation of the waste, for purposes of determining the total annual benzene quantity from facility waste.

b. [61.355(b)]
For purposes of the calculation required by 40 CFR 61.355(a) [See section A.V], the permittee shall determine the annual waste quantity at the point of waste generation, unless otherwise provided in 40 CFR 61.355(b)(1), (3), and (4), by one of the methods given in 40 CFR 61.355(b)(5) through (7).

i. [61.355(b)(1)]
The determination of annual waste quantity for sour water streams that are processed in sour water strippers shall be made at the point that the water exits the sour water stripper.

ii. [61.355(b)(3)]
The determination of annual waste quantity for wastes that are received at hazardous waste treatment, storage, or disposal facilities from offsite shall be

made at the point where the waste enters the hazardous waste treatment, storage, or disposal facility.

iii. [61.355(b)(4)]
The determination of annual waste quantity for each process unit turnaround waste generated only at 2 year or greater intervals, may be made by dividing the total quantity of waste generated during the most recent process unit turnaround by the time period (in the nearest tenth of a year) between the turnaround resulting in generation of the waste and the most recent preceding process turnaround for the unit. The resulting annual waste quantity shall be included in the calculation of the annual benzene quantity as provided in 40 CFR 61.355(a)(1)(iii) for the year in which the turnaround occurs and for each subsequent year until the unit undergoes the next process turnaround. For estimates of total annual benzene quantity as specified in the 90-day report, required under 40 CFR 61.357(a)(1) [See section A.IV.], the permittee shall estimate the waste quantity generated during the most recent turnaround, and the time period between turnarounds in accordance with good engineering practices. If the permittee chooses not to annualize process unit turnaround waste, as specified in this paragraph, then the process unit turnaround waste quantity shall be included in the calculation of the annual benzene quantity for the year in which the turnaround occurs.

iv. [61.355(b)(5)]
Select the highest annual quantity of waste managed from historical records representing the most recent 5 years of operation or, if the facility has been in service for less than 5 years but at least 1 year, from historical records representing the total operating life of the facility;

v. [61.355(b)(6)]
Use the maximum design capacity of the waste management unit; or

vi. [61.355(b)(7)]
Use measurements that are representative of maximum waste generation rates.

c. [61.355(c)]
For the purposes of the calculation required by 40 CFR 61.355(a), the permittee shall determine the flow-weighted annual average benzene concentration in a manner that meets the requirements given in paragraph (c)(1) of 40 CFR 61.355 using either of the methods given in paragraphs (c)(2) and (c)(3) of 40 CFR 61.355.

i. [61.355(c)(1)]
The determination of flow-weighted annual average benzene concentration shall meet all of the following criteria:

(a) [61.355(c)(1)(i)]
The determination shall be made at the point of waste generation except for the specific cases given in paragraphs (c)(1)(i)(A) through (D) of 40 CFR 61.355.

(i) [61.355(c)(1)(i)(A)]
The determination for sour water streams that are processed in sour water strippers shall be made at the point that the water exits the sour water stripper.

(ii) [61.355(c)(1)(i)(C)]
The determination for wastes that are received from offsite shall be made at the point where the waste enters the hazardous waste treatment, storage, or disposal facility.

(iii) [61.355(c)(1)(i)(D)]
The determination of flow-weighted annual average benzene concentration for process unit turnaround waste shall be made using either of the methods given in paragraph (c)(2) or (c)(3) of 40 CFR 61.355. The resulting flow-weighted annual average benzene concentration shall be included in the calculation of annual benzene quantity as provided in paragraph (a)(1)(iii) of 40 CFR 61.355 for the year in which the turnaround occurs and for each subsequent year until the unit undergoes the next process unit turnaround.

(b) [61.355(c)(1)(ii)]
Volatilization of the benzene by exposure to air shall not be used in the determination to reduce the benzene concentration.

(c) [61.355(c)(1)(iii)]
Mixing or diluting the waste stream with other wastes or other materials shall not be used in the determination to reduce the benzene concentration.

(d) [61.355(c)(1)(iv)]
The determination shall be made prior to any treatment of the waste that removes benzene, except as specified in paragraphs (c)(1)(i)(A) through (D) of 40 CFR 61.355.

(e) [61.355(c)(1)(v)]
For wastes with multiple phases, the determination shall provide the weighted-average benzene concentration based on the benzene concentration in each phase of the waste and the relative proportion of the phases.

ii. [61.355(c)(2)]
*Knowledge of the waste.* The permittee shall provide sufficient information to document the flow-weighted annual average benzene concentration of each waste stream. Examples of information that could constitute knowledge include material balances, records of chemicals purchases, or previous test results provided the results are still relevant to the current waste stream conditions. If test data are used, then the permittee shall provide documentation describing the testing

protocol and the means by which sampling variability and analytical variability were accounted for in the determination of the flow-weighted annual average benzene concentration for the waste stream. When a permittee and the Administrator do not agree on determinations of the flow-weighted annual average benzene concentration based on knowledge of the waste, the procedures under 40 CFR 61.355(c)(3) shall be used to resolve the disagreement.

iii. [61.355(c)(3)]
Measurements of the benzene concentration in the waste stream in accordance with the following procedures:

(a) [61.355(c)(3)(i)]
Collect a minimum of three representative samples from each waste stream. Where feasible, samples shall be taken from an enclosed pipe prior to the waste being exposed to the atmosphere.

(b) [61.355(c)(3)(ii) and (c)(3)(ii)(A) through (H)]
For waste in enclosed pipes, the following procedures shall be used:

(i) Samples shall be collected prior to the waste being exposed to the atmosphere in order to minimize the loss of benzene prior to sampling.

(ii) A static mixer shall be installed in the process line or in a by-pass line unless the permittee demonstrates that installation of a static mixer in the line is not necessary to accurately determine the benzene concentration of the waste stream.

(iii) The sampling tap shall be located within two pipe diameters of the static mixer outlet.

(iv) Prior to the initiation of sampling, sample lines and cooling coil shall be purged with at least four volumes of waste.

(v) After purging, the sample flow shall be directed to a sample container and the tip of the sampling tube shall be kept below the surface of the waste during sampling to minimize contact with the atmosphere.

(vi) Samples shall be collected at a flow rate such that the cooling coil is able to maintain a waste temperature less than 10°C.

(vii) After filling, the sample container shall be capped immediately (within 5 seconds) to leave a minimum headspace in the container.

(viii) The sample containers shall immediately be cooled and maintained at a temperature below 10°C for transfer to the laboratory.

(c) [61.355(c)(3)(iii)]
When sampling from an enclosed pipe is not feasible, a minimum of three representative samples shall be collected in a manner to minimize exposure of the sample to the atmosphere and loss of benzene prior to sampling.

(d) [61.355(c)(3)(iv) and (c)(3)(iv)(A) through (F)]
Each waste sample shall be analyzed using one of the following test methods for determining the benzene concentration in a waste stream:

(i) Method 8020, Aromatic Volatile Organics, in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in 40 CFR 61.18);

(ii) Method 8021, Volatile Organic Compounds in Water by Purge and Trap Capillary Column Gas Chromatography with Photoionization and Electrolytic Conductivity Detectors in Series in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in 40 CFR 61.18);

(iii) Method 8240, Gas Chromatography/Mass Spectrometry for Volatile Organics in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified 40 CFR 61.18);

(iv) Method 8260, Gas Chromatography/Mass Spectrometry for Volatile Organics: Capillary Column Technique in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in 40 CFR 61.18);

(v) Method 602, Purgeable Aromatics, as described in 40 CFR Part 136, Appendix A, Test Procedures for Analysis of Organic Pollutants, for wastewaters for which this is an approved EPA methods; or

(vi) Method 624, Purgeables, as described in 40 CFR Part 136, Appendix A, Test Procedures for Analysis of Organic Pollutants, for wastewaters for which this is an approved EPA method.

(e) [61.355(c)(3)(v)]
The flow-weighted annual average benzene concentration shall be calculated by averaging the results of the sample analyses as follows:

$$C = 1 / Q_t \sum_{i=1}^{n} (Q_i C_i)$$

Where:
C=Flow-weighted annual average benzene concentration for waste stream, ppmw;
$Q_t$=Total annual waste quantity for waste stream, kg/yr (lb/yr);
n=Number of waste samples (at least 3);
$Q_i$=Annual waste quantity for waste stream represented by $C_i$, kg/yr (lb/yr); and
$C_i$=Measured concentration of benzene in waste sample i, ppmw.

d. [61.355(d)]
A permittee using performance tests to demonstrate compliance of a treatment process with 40 CFR 61.348(a)(1)(i) [See section A.II.] shall measure the flow-weighted annual average benzene concentration of the waste stream exiting the treatment process by collecting and analyzing a minimum of three representative samples of the waste stream using the procedures in 40 CFR 61.355(c)(3) The test shall be conducted under conditions that exist when the treatment process is operating at the highest inlet waste stream flow rate and benzene content expected to occur. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a test. The permittee shall record all process information as is necessary to document the operating conditions during the test.

e. [61.355(e)]
The permittee using performance tests to demonstrate compliance of a treatment process with 40 CFR 61.348(a)(1)(ii) [See section A.II] shall determine the percent reduction of benzene in the waste stream on a mass basis by the following procedure:

i. [61.355(e)(1)]
The test shall be conducted under conditions that exist when the treatment process is operating at the highest inlet waste stream flow rate and benzene content expected to occur. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a test. The permittee shall record all process information as is necessary to document the operating conditions during the test.

ii. [61.355(e)(2)]
All testing equipment shall be prepared and installed as specified in the appropriate test methods.

iii. [61.355(e)(3)]
The mass flow rate of benzene entering the treatment process ($E_b$) shall be determined by computing the product of the flow rate of the waste stream entering the treatment process, as determined by the inlet flow meter, and the benzene concentration of the waste stream, as determined using the sampling and analytical procedures specified in paragraph (c)(2) or (c)(3) of 40 CFR 61.355.

Three grab samples of the waste shall be taken at equally spaced time intervals over a 1-hour period. Each 1-hour period constitutes a run, and the performance test shall consist of a minimum of 3 runs conducted over a 3-hour period. The mass flow rate of benzene entering the treatment process is calculated as follows:

$$E_b = K / (n \times 10^6) \times [\sum_{i=1}^{n} V_i C_i]$$

Where:
$E_b$=Mass flow rate of benzene entering the treatment process, kg/hour;
K=Density of the waste stream, kg/m$^3$ (lb/ft$^3$);
$V_i$=Average volume flow rate of waste entering the treatment process during each run i, m$^3$hour (ft$^3$);
$C_i$=Average concentration of benzene in the waste stream entering the treatment process during each run i, ppmw;
n=Number of runs; and
$10^6$ = Conversion for ppmw.

iv. [61.355(e)(4)]
The mass flow rate of benzene exiting the treatment process ($E_a$) shall be determined by computing the product of the flow rate of the waste stream exiting the treatment process, as determined by the outlet flow meter or the inlet flow meter, and the benzene concentration of the waste stream, as determined using the sampling and analytical procedures specified in paragraph (c)(2) or (c)(3) of 40 CFR 61.355. Three grab samples of the waste shall be taken at equally spaced time intervals over a 1-hour period. Each 1-hour period constitutes a run, and the performance test shall consist of a minimum of 3 runs conducted over the same 3-hour period at which the mass flow rate of benzene entering the treatment process is determined. The mass flow rate of benzene exiting the treatment process is calculated as follows:

$$E_a = K / (n \times 10^6) \times [\sum_{i=1}^{n} V_i C_i]$$

Where:
$E_a$=Mass flow rate of benzene exiting the treatment process, kg/hour (lb/hr);
K=Density of the waste stream, kg/m$^3$ (lb/ft$^3$);
$V_i$=Average volume flow rate of waste exiting the treatment process during each run i, m$^3$/hour (ft$^3$/hr);

$C_i$=Average concentration of benzene in the waste stream exiting the treatment process during each run i, ppmw;
n=Number of runs; and
$10^6$ = Conversion factor for ppmw.

f. [61.355(f)]
The permittee using performance tests to demonstrate compliance of a treatment process with 40 CFR 61.348(a)(1)(iii) [See section A.II] shall determine the benzene destruction efficiency for the combustion unit by the following procedure:

i. [61.355(f)(1)]
The test shall be conducted under conditions that exist when the combustion unit is operating at the highest inlet waste stream flow rate and benzene content expected to occur. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a test. The permittee shall record all process information necessary to document the operating conditions during the test.

ii. [61.355(f)(2)]
All testing equipment shall be prepared and installed as specified in the appropriate test methods.

iii. [61.355(f)(3)]
The mass flow rate of benzene entering the combustion unit shall be determined by computing the product of the flow rate of the waste stream entering the combustion unit, as determined by the inlet flow meter, and the benzene concentration of the waste stream, as determined using the sampling procedures in paragraph (c)(2) or (c)(3) of 40 CFR 61.355. Three grab samples of the waste shall be taken at equally spaced time intervals over a 1-hour period. Each 1-hour period constitutes a run, and the performance test shall consist of a minimum of 3 runs conducted over a 3-hour period. The mass flow rate of benzene into the combustion unit is calculated as follows:

$$E_b = K / (n \times 10^6) \times [\sum_{i=1}^{n} V_i C_i]$$

Where:

$E_b$=Mass flow rate of benzene into the combustion unit, kg/hour (lb/hr);
K=Density of the waste stream, kg/m$^3$ (lb/ft$^3$);
$V_i$=Average volume flow rate of waste entering the combustion unit during each run i, m$^3$/hour (ft$^3$/hr);
$C_i$=Average concentration of benzene in the waste stream entering the combustion unit during each run i, ppmw;
n=Number of runs; and
$10^6$ = Conversion for ppmw.

iv. [61.355(f)(4)]
The mass flow rate of benzene exiting the combustion unit exhaust stack shall be determined as follows:

(a) [61.355(f)(4)(i)]
The time period for the test shall not be less than 3 hours during which at least 3 stack gas samples are collected and be the same time period at which the mass flow rate of benzene entering the treatment process is determined. Each sample shall be collected over a 1-hour period (e.g., in a tedlar bag) to represent a time-integrated composite sample and each 1-hour period shall correspond to the periods when the waste feed is sampled.

(b) [61.355(f)(4)(ii)]
A run shall consist of a 1-hour period during the test. For each run:

(i) [61.355(f)(4)(ii)(A)]
The reading from each measurement shall be recorded;

(ii) [61.355(f)(4)(ii)(B)]
The volume exhausted shall be determined using method 2, 2A, 2C, or 2D from Appendix A of 40 CFR Part 60, as appropriate; and

(iii) [61.355(f)(4)(ii)(C)]
The average benzene concentration in the exhaust downstream of the combustion unit shall be determined using method 18 from Appendix A of 40 CFR Part 60.

(c) [61.355(f)(4)(iii)]
The mass of benzene emitted during each run shall be calculated as follows:

$$M_i = D_b VC(10^{-6})$$

Where:
$M_i$=Mass of benzene emitted during run i, kg (lb);
V=Volume of air-vapor mixture exhausted at standard conditions, $m^3$ ($ft^3$);
C=Concentration of benzene measured in the exhaust, ppmv;
$D_b$ = Density of benzene = 3.24 $kg/m^3$ (0.202 $lb/ft^3$); and
$10^{-6}$ = Conversion factor for ppmv.

(d) [61.355(f)(4)(iv)]
The benzene mass emission rate in the exhaust shall be calculated as follows:

$$E_a ? (?_{i?1}^{n} M_i) / T$$

Where:

$E_a$=Mass flow rate of benzene emitted, kg/hour lb/hr);
$M_i$=Mass of benzene emitted during run i, kg (lb);
T=Total time of all runs, hour; and
n=Number of runs.

v. [61.355(f)(5)]
The benzene destruction efficiency for the combustion unit shall be calculated as follows:

$$R ? (E_b ? E_a) / E_b ? 100$$

Where:
R=Benzene destruction efficiency for the combustion unit, percent;
$E_b$=Mass flow rate of benzene into the combustion unit, kg/hour (lb/hr); and
$E_a$=Mass flow of benzene from the combustion unit, kg/hour (lb/hr).

g. [61.355(g)]
A permittee using performance tests to demonstrate compliance of a wastewater treatment system unit with 61.348(b) [See section A.II.] shall measure the flow-weighted annual average benzene concentration of the wastewater stream where the waste stream enters an exempt waste management unit by collecting and analyzing a minimum of three representative samples of the waste stream using the procedures in 40 CFR 61.355(c)(3) The test shall be conducted under conditions that exist when the wastewater treatment system is operating at the highest inlet wastewater stream flow rate and benzene content expected to occur. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a test. The permittee shall record all process information as is necessary to document the operating conditions during the test.

h. [61.355(h)]
The permittee shall test equipment for compliance with no detectable emissions as required in 40 CFR 61.343 through 61.347 and 61.349 [See sections A.II and A.III.] in accordance with the following requirements:

i. [61.355(h)(1)]
Monitoring shall comply with Method 21 from Appendix A of 40 CFR Part 60.

ii. [61.355(h)(2)]
The detection instrument shall meet the performance criteria of Method 21.

iii. [61.355(h)(3)]
The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21.

iv. [61.355(h)(4); (h)(4)(i) and (4)(ii)]
Calibration gases shall be with zero air (less than 10 ppm of hydrocarbon in air); and a mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

v. [61.355(h)(5)]
The background level shall be determined as set forth in Method 21.

vi [61.355(h)(6)]
The instrument probe shall be traversed around all potential leak interfaces as close as possible to the interface as described in Method 21.

vii. [61.355(h)(7)]
The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared to 500 ppm for determining compliance.

i. [61.355(i)]
A permittee using a performance test to demonstrate compliance of a control device with either the organic reduction efficiency requirement or the benzene reduction efficiency requirement specified under 40 CFR 61.349(a)(2) [See section A.II.] shall use the following procedures:

i. [61.355(i)(1)]
The test shall be conducted under conditions that exist when the waste management unit vented to the control device is operating at the highest load or capacity level expected to occur. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a test. The permittee shall record all process information necessary to document the operating conditions during the test.

ii. [61.355(i)(2)]
Sampling sites shall be selected using Method 1 or 1A from 40 CFR Part 60, Appendix A, as appropriate.

iii. [61.355(i)(3)]
The mass flow rate of either the organics or benzene entering and exiting the control device shall be determined as follows:

(a) [61.355(i)(3)(i)]
The time period for the test shall not be less than 3 hours during which at least 3 stack gas samples are collected. Samples of the vent stream entering and exiting the control device shall be collected during the same

time period. Each sample shall be collected over a 1-hour period (e.g., in a tedlar bag) to represent a time-integrated composite sample.

(b) [61.355(i)(3)(ii) and (i)(3)(ii)(A) through (C)]
A run shall consist of a 1-hour period during the test. For each run:
(i) The reading from each measurement shall be recorded;
(ii) The volume exhausted shall be determined using Method 2, 2A, 2C, or 2D from 40 CFR Part 60, Appendix A, as appropriate;
(iii) The organic concentration or the benzene concentration, as appropriate, in the vent stream entering and exiting the control shall be determined using Method 18 from 40 CFR Part 60, Appendix A.

(c) [61.355(i)(3)(iii)]
The mass of organics or benzene entering and exiting the control device during each run shall be calculated as follows:

$$M_{aj} ? (K_1 V_{aj}) / 10^6 ) ? (\overset{n}{\underset{i?1}{?}} C_{ai} MW_i)$$

$$M_{bj} ? (K_1 V_{bj}) / 10^6 ) ? (\overset{n}{\underset{i?1}{?}} C_{bi} MW_i)$$

Where:

$M_{aj}$=Mass of organics or benzene in the vent stream entering the control device during run j, kg(lb);
$M_{bj}$=Mass of organics or benzene in vent stream exiting the control device during run j, kg(lb);
$V_{aj}$=Volume of vent stream entering the control device during run j at standards conditions, $m^3(ft^3)$;
$V_{bj}$=Volume of vent stream exiting the control device during run j at standards conditions, $m^3(ft^3)$;
$C_{ai}$=Organic concentration of compound i or benzene concentration measured in the vent stream entering the control device as determined by Method 18, ppm by volume on a dry basis;
$C_{bi}$=Organic concentration of compound i measured in the vent stream exiting the control device as determined by method 18, ppm by volume on a dry basis;
$MW_i$=Molecular weight of organic compound i in the vent stream or molecular weight of benzene, kg/kg-mo1(lb/lb-mole);
n=Number of organic compounds in the vent stream; if benzene reduction efficiency is being demonstrated, then n=1;
$K_1$ =Conversion factor for molar volume=0.0416 kg-mol/$m^3$ (at 293°K and 760 mm Hg(527 R and 14.7 psia)) = 0.0416 kg-mol/$m^3$ (0.00118lb-mol/$ft^3$); and
$10^{-6}$=Conversion factor for ppmv.

(d) [61.355(i)(3)(iv)]
The mass flow rate of organics or benzene entering and exiting the control device shall be calculated using as follows:

$$E_a = \left(\sum_{j=1}^{n} M_{aj}\right) / T$$

$$E_b = \left(\sum_{j=1}^{n} M_{bj}\right) / T$$

$E_a$=Mass flow rate of organics or benzene entering the control device, kg/hr (lb/hr);
$E_b$=Mass flow rate of organics or benzene exiting the control device, kg/hr (lb/hr);
$M_{aj}$=Mass of organics or benzene in the vent stream entering the control device during run j, kg (lb);
$M_{bj}$=Mass of organics or benzene in vent stream exiting the control device during run j, kg (lb);
T=Total time of all runs, hour; and
n=Number of runs.

iv. [61.355(i)(4)]

The organic reduction efficiency for the control device shall be calculated as follows:

$$R = (E_a - E_b) / E_a$$

Where:
R=Total organic reduction efficiency or benzene reduction efficiency for the control device, percent;
$E_b$=Mass flow rate of organics or benzene entering the control device, kg/hr (lb/hr); and
$E_a$=Mass flow rate of organics or benzene emitted from the control device, kg/hr (lb/hr).

j. [61.355(j)]
A permittee shall determine the benzene quantity for the purposes of the calculation required by 40 CFR 61.342(c)(3)(ii)(B) [See section A.II.], according to the provisions of 40 CFR 61.355(a) [See section A.V], except that the procedures in 40 CFR 61.355(a) shall also apply to wastes with a water content of 10 percent or less.

$R ? (E_a ? E_b) / E_a ? 100$

k. [61.355(k)]
The permittee shall determine the benzene quantity for the purposes of the calculation required by 40 CFR 61.342(e)(2) [See section A.II] by the following procedure:

i. [61.355(k)(1)]
For each waste stream that is not controlled for air emissions in accordance with 40 CFR 61.343. 61.344, 61.345, 61.346, 61.347, or 61.348(a), as applicable to the waste management unit that manages the waste, the benzene quantity shall be determined as specified in paragraph (a) of 40 CFR 61.355, except that paragraph (b)(4) of 40 CFR 61.355 shall not apply, i.e., the waste quantity for process unit turnaround waste is not annualized but shall be included in the determination of benzene quantity for the year in which the waste is generated for the purposes of the calculation required by 40 CFR 61.342(e)(2).

ii. [61.355(k)(2)]
For each waste stream that is controlled for air emissions in accordance with 40 CFR 61.343. 61.344, 61.345, 61.346, 61.347, or 61.348(a) [See section A.II], as applicable to the waste management unit that manages the waste, the determination of annual waste quantity and flow-weighted annual average benzene concentration shall be made at the first applicable location as described in paragraphs (k)(2)(i), (k)(2)(ii), and (k)(2)(iii) of 40 CFR 61.355 and prior to any reduction of benzene concentration through volatilization of the benzene, using the methods given in (k)(2)(iv) and (k)(2)(v) of 40 CFR 61.355.

(a) [61.355(k)(2)(i)]
where the waste stream enters the first waste management unit not complying with 40 CFR 61.343, 61.344, 61.345, 61.346, 61.347, and 61.348(a) that are applicable to the waste management unit;

(b) [61.355(k)(2)(ii)]
For each waste stream that is managed or treated only in compliance with 40 CFR 61.343 through 61.348(a) up to the point of final direct discharge from the facility, the determination of benzene quantity shall be prior to any reduction of benzene concentration through volatilization of the benzene; or

(c) [61.355(k)(2)(iii)]
For wastes managed in units controlled for air emissions in accordance with 40 CFR 61.343, 61.344, 61.345, 61.346, 61.347, and 61.348(a), and then transferred offsite, facilities shall use the first applicable offsite location as described in paragraphs (k)(2)(i) and (k)(2)(ii) of 40 CFR 61.355 if they have documentation from the offsite facility of the benzene quantity at this location. Facilities without this documentation for offsite wastes shall use the benzene quantity determined at the point where the transferred waste leaves the facility.

(d) [61.355(k)(2)(iv)]
Annual waste quantity shall be determined using the procedures in paragraphs (b)(5), (6), or (7) of 40 CFR 61.355; and

(e) [61.355(k)(2)(v)]
The flow-weighted annual average benzene concentration shall be determined using the procedures in paragraphs (c)(2) or (3) of 40 CFR 61.355.

iii. [61.355(k)(3)]
The benzene quantity in a waste stream that is generated less than one time per year, including process unit turnaround waste, shall be included in the determination of benzene quantity as determined in paragraph (k)(6) of 40 CFR 61.355 for the year in which the waste is generated. The benzene quantity in this waste stream shall not be annualized or averaged over the time interval between the activities that resulted in generation of the waste for purposes of determining benzene quantity as determined in paragraph (k)(6) 40 CFR 61.355.

iv. [61.355(k)(4)]
The benzene in waste entering an enhanced biodegradation unit, as defined in 40 CFR 61.348(b)(2)(ii)(B) [See section A.II], shall not be included in the determination of benzene quantity, determined in paragraph (k)(6) of 40 CFR 61.355, if the following conditions are met:

(a) [61.355(k)(4)(i)]
The benzene concentration for each waste stream entering the enhanced biodegradation unit is less than 10 ppmw on a flow-weighted annual average basis; and

(b) [61.355(k)(4)(ii)]
All prior waste management units managing the waste comply with 40 CFR 61.343, 61.344, 61.345, 61.346, 61.347 and 61.348(a) [See section A.II].

v. [61.355(k)(5)]
The benzene quantity for each waste stream in paragraph (k)(2) of 40 CFR 61.355 shall be determined by multiplying the annual waste quantity of each waste stream times its flow-weighted annual average benzene concentration.

vi. [61.355(k)(6)]
The total benzene quantity for the purposes of the calculation required by 40 CFR 61.342(e)(2) [See section A.II] shall be determined by adding together the benzene quantities determined in paragraphs (k)(1) and (k)(5) of 40 CFR 61.355 for each applicable waste stream.

vii. [40 CFR 61.355(k)(7)]

If the benzene quantity determined in paragraph (6) of 40 CFR 61.355 exceeds 6.0 Mg/yr (6.6 ton/yr) only because of multiple counting of the benzene quantity for a waste stream, the permittee may use the following procedures for the purposes of the calculation required by 40 CFR 61.342(e)(2) [See section A.II]:

(a) [61.355(k)(7)(i)]
Determine which waste management units are involved in the multiple counting of benzene;

(b) [61.355(k)(7)(ii)]
Determine the quantity of benzene that is emitted, recovered, or removed from the affected units identified in paragraph (k)(7)(i) of 40 CFR 61.355, or destroyed in the units if applicable, using either direct measurements or the best available estimation techniques developed or approved by the Administrator of USEPA.

(c) [61.355(k)(7)(iii)]
Adjust the benzene quantity to eliminate the multiple counting of benzene based on the results from paragraph (k)(7)(ii) of 40 CFR 61.355 and determine the total benzene quantity for the purposes of the calculation required by 40 CFR 61.342(e)(2).

(d) [61.355(k)(7)(iv)]
Submit in the annual report required under 40 CFR 61.357(a) [See section A.IV] a description of the methods used and the resulting calculations for the alternative procedure under paragraph (k)(7) of 40 CFR 61.355, the benzene quantity determination from paragraph (k)(6) of 40 CFR 61.355, and the adjusted benzene quantity determination from paragraph (k)(7)(iii) of 40 CFR 61.355.

4. Testing Requirements - 40 CFR Part 60, Subpart QQQ

a. [60.692-1(b)]
Compliance with 40 CFR 60.692-1 to 60.692-5 and with 60.693-1 and 60.693-2 will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in 40 CFR 60.696.

b. [60.696] Performance test methods and procedures and compliance provisions - 40 CFR Part 60, Subpart QQQ

i. [60.696(a)]
Before using any equipment installed in compliance with the requirements of 40 CFR 60.692-2, 60.692-3, 60.692-4, 60.692-5, or 60.693 [See section A.II], the permittee shall inspect such equipment for indications of potential emissions, defects, or other problems that may cause the requirements of this subpart not to be met. Points of inspection shall include, but are not limited to, seals, flanges, joints, gaskets, hatches, caps, and plugs.

ii. [60.696(b)]
The permittee of each source that is equipped with a closed vent system and control device as required in 40 CFR 60.692-5 [See section A.II] (other than a flare) is exempt from 40 CFR 60.8 of the General Provisions and shall use Method 21 to measure the emission concentrations, using 500 ppm as the no detectable emission limit. The instrument shall be calibrated each day before using. The calibration gases shall be:

(a) [60.696(b)(1)]
Zero air (less than 10 ppm of hydrocarbon in air); and

(b) [60.696(b)(2)]
A mixture of either methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

iii. [60.696(c)]
The permittee shall conduct a performance test initially, and at other times as requested by the Administrator, using the test methods and procedures in 40 CFR 60.18(f) to determine compliance of flares.

iv. [60.696(d)]
After installing the control equipment required to meet 40 CFR 60.693-2(a) or whenever sources that have ceased to treat refinery wastewater for a period of 1 year or more are placed back into service, the permittee shall determine compliance with the standards in 40 CFR 60.693-2(a) as follows:

(a) [60.696(d)(1)]
The maximum gap widths and maximum gap areas between the primary seal and the separator wall and between the secondary seal and the separator wall shall be determined individually within 60 calendar days of the initial installation of the floating roof and introduction of refinery wastewater or 60 calendar days after the equipment is placed back into service using the following procedure when the separator is filled to the design operating level and when the roof is floating off the roof supports.

(i) [60.696(d)(1)(i)]
Measure seal gaps around the entire perimeter of the separator in each place where a 0.32 cm (0.125 in.) diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the wall of the separator and measure the gap width and perimetrical distance of each such location.

(ii) [60.696(d)(1)(ii)]
The total surface area of each gap described in 40 CFR 60.696(d)(1)(i) shall be determined by using probes of various widths to measure accurately the actual distance from the wall to

the seal and multiplying each such width by its respective perimetrical distance.

(iii) [60.696(d)(1)(iii)]
Add the gap surface area of each gap location for the primary seal and the secondary seal individually, divide the sum for each seal by the nominal perimeter of the separator basin and compare each to the maximum gap area as specified in 40 CFR 60.693-2 [See section A.II].

(b) [60.696(d)(2)]
The gap widths and total gap area shall be determined using the procedure in 40 CFR 60.696(d)(1) according to the following frequency:

(i) [60.696(d)(2)(i)]
For primary seals, once every 5 years.

(ii) [60.696(d)(2)(ii)]
For secondary seals, once every year.

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| P028 - "A" Train Diesel Hydrotreater with blowdown emissions controlled by the West Flare | OAC rule 3745-31-05(A)(3) (PTI 04-708) | 22.03 tons per year volatile organic compound (VOC) emissions (from equipment leaks)<br><br>See A.I.2.c and A.I.2.h. |
| | 40 CFR Part 60, Subpart A | See section A.I.2.i. |
| | 40 CFR Part 60, Subpart QQQ | See section A.I.2.b. |
| | equipment leaks<br>40 CFR Part 63, Subpart A | See sections A.I.2.d and A.I.2.e. |
| | 40 CFR Part 63, Subpart CC<br>40 CFR 63.648 | See sections A.I.2.e and A.I.2.f. |
| | 40 CFR Part 60, Subpart GGG | See section A.I.2.a. |
| | OAC rule 3745-21-09(T) | See section A.I.2.g. |

**2. Additional Terms and Conditions**

2.a Equipment leaks that are subject to the provisions of both 40 CFR Part 60, Subpart GGG and 40 CFR Part 63, Subpart CC are required to comply only with the provisions specified in 40 CFR Part 63, Subpart CC.

2.b In accordance with 40 CFR Part 60, Subpart QQQ, the permittee shall establish an individual drain system monitoring and record keeping program as outlined in the terms and conditions for emissions unit P025 (Refinery Wastewater System).

2.c The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(T) and 40 CFR Part 60, Subparts A, GGG, and QQQ.

2.d 40 CFR Part 63, Subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 63.

2.e Table 6 of 40 CFR Part 63, Subpart CC specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.f Refer to Part II of this permit for the applicable equipment leak provisions found in sections A.I.2., A.II., A.III., A.IV. and A.V., referencing 40 CFR Part 60, Subpart VV.

2.g Refer to Part II of this permit for the state requirements for equipment leaks found in sections A.I.2., A.II., A.III., A.IV. and A.V., referencing OAC rule 3745-21-09(T).

2.h The annual emission limitation was established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop monitoring, record keeping and/or reporting requirements to ensure compliance with this limitation.

2.i The flare shall meet the requirements of 40 CFR 60.18 (c) through (f). Refer to Part II Sections A.I through A.V of this permit for the monitoring, record keeping, reporting and testing requirements for refinery flares.

## II. Operational Restrictions

1. See the applicable sections in Part II for equipment leaks in A.II., referencing 40 CFR Part 60, Subpart VV. and OAC rule 3745-21-09(T).

## III. Monitoring and/or Record Keeping Requirements

1. See the applicable sections in Part II for equipment leaks in A.III., referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

## IV. Reporting Requirements

1. See the applicable sections in Part II for equipment leaks in A.IV., referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

## V. Testing Requirements

1. See the applicable sections in Part II for equipment leaks in A.V., referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. Compliance with the emission limitation(s) of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitation:

22.03 tons per year VOC emissions from equipment leaks

Applicable Compliance Method:

The monitoring, record keeping and reporting requirements of A.II.1, A.III.1and A.IV.1 shall serve as demonstration of compliance with this emission limitation. The emission limit of 22.03 tons per year VOC emissions from equipment leaks was determined by multiplying the total number of components by a leaking factor of 2% of the total components. This product is then multiplied by the corresponding leak screening value correlation, multiplied by 2.2 lbs/kg, multiplied by 8760 hours per year, and divided by 2000 pounds per ton to obtain the VOC emission rate in tons per year for each type of leaking component for a total of 22.03 tons per year VOC emissions from equipment leaks. The leak screening values are listed in tables 2-10 and 2-14 of *Protocol for Equipment Leak Emission Estimates* (EPA document 453/R-95-017 or subsequent updates).

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| P029 - "B" Train Diesel Hydrotreater with blowdown emissions controlled by the West Flare | OAC rule 3745-31-05(A)(3) as established by PTI 04-708 as issued March 18, 1992. | 19.11 tons per year volatile organic compound (VOC) emissions (from equipment leaks)<br><br>See sections A.I.2.c and A.I.2.h. |
| | 40 CFR Part 60, Subpart A | See section A.I.2.i. |
| | 40 CFR Part 60, Subpart QQQ | See section A.I.2.b. |
| | equipment leaks<br>40 CFR Part 63, Subpart A | See sections A.I.2.d and A.I.2.e. |
| | 40 CFR Part 63, Subpart CC<br>40 CFR 63.648 | See sections A.I.2.e and A.I.2.f. |
| | 40 CFR Part 60, Subpart GGG | See section A.I.2.a. |
| | OAC rule 3745-21-09(T) | See section A.I.2.g. |

**2. Additional Terms and Conditions**

2.a Equipment leaks that are subject to the provisions of both 40 CFR Part 60, Subpart GGG and 40 CFR Part 63, Subpart CC are required to comply only with the provisions specified in 40 CFR Part 63, Subpart CC.

2.b In accordance with 40 CFR Part 60, Subpart QQQ, the permittee shall establish an individual drain system monitoring and record keeping program as outlined in the terms and conditions for emissions unit P025 (Refinery Wastewater System).

2.c The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(T) and 40 CFR Part 60, Subparts A, GGG, and QQQ.

2.d 40 CFR Part 63, Subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 63.

2.e Table 6 of 40 CFR Part 63, Subpart CC specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.f Refer to Part II of this permit for the applicable equipment leak provisions found in sections A.I.2., A.II., A.III., A.IV. and A.V., referencing 40 CFR Part 60, Subpart VV.

2.g Refer to Part II of this permit for the state requirements for equipment leaks found in sections A.I.2., A.II., A.III., A.IV. and A.V., referencing OAC rule 3745-21-09(T).

2.h The annual emission limitation was established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop monitoring, record keeping and/or reporting requirements to ensure compliance with this limitation.

2.i The flare shall meet the requirements of 40 CFR 60.18 (c) through (f). Refer to Part II sections A.I through A.V of this permit for the monitoring, record keeping, reporting, and testing requirements for refinery flares.

## II. Operational Restrictions

1. See the applicable sections in Part II for equipment leaks in A.II., referencing 40 CFR Part 60, Subpart VV. and OAC rule 3745-21-09(T).

## III. Monitoring and/or Record Keeping Requirements

1. See the applicable sections in Part II for equipment leaks in A.III., referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

## IV. Reporting Requirements

1. See the applicable sections in Part II for equipment leaks in A.IV., referencing 40 CFR Part 60, Subpart VV. and OAC rule 3745-21-09(T).

## V. Testing Requirements

1. See the applicable sections in Part II for equipment leaks in A.V., referencing 40 CFR Part 60, Subpart VV. and OAC rule 3745-21-09(T).

2. Compliance with the emission limitation(s) of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitation:

19.11 tons per year VOC emissions from equipment leaks

Applicable Compliance Method:

The emission limit of 19.11 tons per year VOC emissions from equipment leaks was determined by multiplying the total number of components by a leaking factor of 2% of the total components. This product is then multiplied by the corresponding leak screening value correlation, multiplied by 2.2 lbs/kg, multiplied by 8760 hours per year, and divided by 2000 pounds per ton to obtain the VOC emission rate in tons per year for each type of leaking component for a total of 19.11 tons per year VOC emissions from equipment leaks. The leak screening values are listed in tables 2-10 and 2-14 of *Protocol for Equipment Leak Emission Estimates* (EPA document 453/R-95-017 or subsequent updates).

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| P036 - Coker 3/ delayed petroleum coker | OAC rule 3745-21-09(T) | See section A.I.2.a. |
| | OAC rule 3745-31-05(A)(3) (PTI 04-1046) | 7.38 pounds per hour of volatile organic compounds (VOC) as a rolling, 30-day average<br><br>12.12 tons of VOC emissions per rolling, 30-day period (from coke cutting)<br><br>10.81 tons of VOC from fugitive emissions (equipment leaks) per rolling, 12-month period<br><br>See section A.I.2.b. |
| | 40 CFR Part 60, Subpart GGG | See section A.I.2.c. |
| | 40 CFR Part 63, Subpart A | See sections A.I.2.d and A.I.2.e. |
| | 40 CFR Part 63, Subpart CC<br>40 CFR 63.648 | See sections A.I.2.e and A.I.2.f. |
| | miscellaneous process vents<br>40 CFR Part 63, Subpart CC | See section A.I.2.g. |

**2. Additional Terms and Conditions**

2.a Refer to Part II of this permit for the state requirements for equipment leaks found in sections A.I.2., A.II., A.III., A.IV. and A.V., referencing OAC rule 3745-21-09(T).

2.b The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(T) and 40 CFR Part 60, Subpart GGG.

2.c Equipment leaks that are subject to the provisions of both 40 CFR Part 60, Subpart GGG and 40 CFR Part 63, Subpart CC are required to comply only with the provisions specified in 40 CFR Part 63, Subpart CC.

2.d. 40 CFR Part 63, Subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 63.

2.e. Table 6 of 40 CFR Part 63, Subpart CC specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.f. Refer to Part II of this permit for the applicable equipment leak provisions found in sections A.I.2., A.II., A.III., A.IV. and A.V., referencing 40 CFR Part 60, Subpart VV.

2.g Refer to Part II of this permit for the miscellaneous process vent provisions found in sections A.I.2., A.II., A.III., A.IV. and A.V., referencing 40 CFR Part 63, Subpart CC.

## II. Operational Restrictions

1. Blowdown emissions shall be vented to the flare gas recovery system.

2. See the applicable sections in Part II for equipment leaks in A.II., referencing 40 CFR Part 60, Subpart VV.

3. See the applicable sections in Part II for miscellaneous process vents in A.II., referencing 40 CFR Part 63, Subpart CC.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain daily records of the hours of operation and the number of coking cycles completed each day. From this data, the permittee shall calculate and record the following emissions from coke cutting: total daily VOC emissions, hourly VOC emissions as a rolling, 30-day average, the monthly VOC emissions, and the rolling, 12-month summation of VOC emissions.

2. Emissions occurring during any malfunction, bypassing control equipment, startup or shutdown period must be quantified and recorded.

3. The permittee shall maintain records of all periods when the blowdown emissions from this emissions unit were not vented to the flare gas recovery system.

4. The permittee shall maintain monthly records of the number, type, and period of time components are determined to be leaking by the monitoring required under section A.III of Part II of this permit. From this information, the permittee shall calculate and record the rolling, 12-month summation of monthly VOC emissions from equipment leaks as determined by section A.V.1.c of Part III of this permit.

5. See the applicable sections in Part II for equipment leaks in A.III., referencing 40 CFR Part 60, Subpart VV.

6. See the applicable sections in Part II for miscellaneous process vents in A.III., referencing 40 CFR Part 63, Subpart CC

## IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports of the following deviations:

   1.a. all periods when emissions exceeded 7.38 pounds per hour of VOC emissions as a rolling, 30-day average (from coke cutting);

   1.b all periods when emissions exceeded 12.12 tons of VOC per rolling, 12-month period (from coke cutting);

   1.c all periods when emissions exceeded 10.81 tons per year of VOC as a rolling, 12-month summation (from equipment leaks); and

   1.d all periods when blowdown emissions from this emissions unit were not vented to the flare gas recovery system.

   If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter.

   These reports shall be submitted quarterly, i.e., by January 30, April 30, July 30, and October 30 of each year, and shall cover the previous calendar quarters.

2. See the applicable sections in Part II for equipment leaks in A.IV., referencing 40 CFR Part 60, Subpart VV.

3. See the applicable sections in Part II for miscellaneous process vents in A.IV., referencing 40 CFR Part 63, Subpart CC.

## V. Testing Requirements

1. Compliance with the emission limitation(s) of these terms and conditions shall be determined in accordance with the following method(s):

   1.a Emission Limitation:

7.38 pounds per hour of VOC emissions as a rolling, 30-day average from coke cutting

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor of 44.28 pounds VOC per blowdown cycle by the number of blowdown cycles per 30-day period, and dividing by the hours of operation for that 30-day period.

The VOC emission factor was supplied by the permittee in the PTI application for PTI 04-1046. If required, the permittee shall verify the coke cutting emission factor usings Methods 1 through 4, 25, and 204 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

1.b Emission Limitation:

12.12 tons per year of VOC per rolling, 12-moth period from coke cutting

Applicable Compliance Method:

Compliance shall be determined by multiplying the VOC emission factor of 44.28 pounds VOC per blowdown cycle by the number of blowdown cycles per month to obtain the monthly total VOC emissions, add this value to the total for the previous 11 months to obtain the 12-month total VOC emissions (in pounds), and divide by 2000 lbs/ton.

The VOC emission factor was supplied by the company in the PTI application for PTI 04-1046.

1.c Emission Limitation:

10.81 tons per year of VOC as a rolling, 12-month summation from fugitive leaks

Applicable Compliance Method:

Compliance shall be determined by multiplying the number of components determined to be leaking under Part II section A.III of this permit by the corresponding leak screening value correlation, multiplied by 2.2 lbs/kg, multiplied by the number of hours leaking per month, and divided by 2000 lbs/ton to obtain the VOC emission rate in tons per month for each type of leaking component. The leak screening values are listed in tables 2-10 and 2-14 of *Protocol for Equipment Leak Emission Estimates* (EPA document 453/R-95-017 or subsequent updates). Sum the monthly total emissions from all types of leaking components and add this value to the total for the previous 11 months to determine the 12-month total VOC emissions, in tons.

2. [PTI 04-1046]
If the Ohio EPA or the permittee believes that the emission factor specified above may not be representative of the actual emissions from this emissions unit, then the permittee shall conduct testing of the emissions unit to determine what the actual emission factor is, and submit the results of that testing to the Ohio EPA. Upon approval by the Director, the new emission factor shall be used for purposes of demonstrating compliance with the specified emission limits.

3. See the applicable sections in Part II for equipment leaks in A.V., referencing 40 CFR Part 60, Subpart VV.

4. See the applicable sections in Part II for miscellaneous process vents in A.V., referencing 40 CFR Part 63, Subpart CC.

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

Emissions Unit ID: **P037**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| P037 - Sulfur Recovery Unit (SRU) Nos. 2 and 3 with Tail Gas Treater, Thermal Oxidizer, and sulfur pit | OAC rule 3745-31-02(A)(2) (PTI 04-01290) | See sections A.I.2.a and A.I.2.b. |
| | OAC rule 3745-31-05(A)(3) (PTI 04-1046) | 2.7 lbs/hr carbon monoxide (CO) and 8.07 tons/yr CO as a rolling, 12-month summation |
| | | 4.4 lbs/hr nitrogen oxides ($NO_x$) and 12.76 tons/yr $NO_x$ as a rolling, 12-month summation |
| | | 0.6 lb/hr particulate emissions and 1.74 tons/yr particulate emissions as a rolling, 12-month summation |
| | | 172 tons/yr sulfur dioxide ($SO_2$) as a rolling, 12-month summation |
| | | 6.2 tons/yr volatile organic compounds (VOC) as a rolling, 12-month summation (from fugitive equipment leaks) |
| | | See sections A.I.2.c and A.II.2. |
| | OAC rule 3745-18-54(W)(7) | See section A.I.2.d. |
| | 40 CFR Part 60, Subpart J | See section A.I.2.e. |
| equipment leaks | OAC rule 3745-21-09(T) | See section A.I.2.f. |
| sulfur recovery unit | 40 CFR Part 60, Subpart GGG | See section A.I.2.g. |

| | | |
|---|---|---|
| | 40 CFR Part 63, Subpart A | See sections A.I.2.h and A.I.2.i. |
| | 40 CFR Part 63, Subpart CC | See sections A.I.2.i and A.I.2.j. |
| bypass lines | 40 CFR Part 63, Subpart UUU<br>40 CFR 63.1563(b) | See section A.I.2.k. |
| | 40 CFR 63.1563(e) | See section A.I.2.l. |
| | 40 CFR 63.1568(a) | See section A.I.2.m. |
| | 40 CFR 63.1577 | See section A.I.2.n. |
| | 40 CFR 63.1569(a) | See sections A.I.2.o and A.I.2.p. |

## 2. Additional Terms and Conditions

2.a Permit to Install 04-01290 incorporates the emission limits and schedules set out in paragraphs 14-18 and 21 of the Consent Decree (United States of America, et al., v. BP Exploration & Oil Co., et al., Civil Action No. 2:96CV095 RL).

2.b The permittee shall re-route all NSPS sulfur recovery plant sulfur pit emissions such that they are treated, monitored, and included as part of the sulfur recovery plant's emissions subject to the NSPS Subpart J limit for $SO_2$, 40 CFR 60.104(a)(2), by no later than the first turnaround of the Claus train that occurs after July 18, 2001.

2.c The emission limitation established by this rule is equivalent to or less stringent than the limit established by 40 CFR Part 60, Subpart J.

2.d The requirements of this rule also include compliance with 40 CFR 60 Subpart J.

2.e The permittee shall not discharge or cause the discharge of any gases into the atmosphere from any Claus sulfur recovery plant containing in excess of 250 ppm by volume (dry basis) of $SO_2$ at zero percent excess air.

2.f The permittee shall comply with all applicable equipment leak terms and conditions found in sections A.I.2, A.II, A.III, A.IV and A.V referencing OAC rule 3745-21-09(T) in Part II - Specific Facility Terms and Conditions of this permit.

2.g As specified under 40 CFR 63.640(p), equipment leaks that are also subject to the provisions of 40 CFR 60 and 61 are required to comply only with the requirements of 40 CFR 63 Subpart CC.

2.h 40 CFR Part 63, Subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 63.

2.i Table 6 of 40 CFR Part 63, Subpart CC specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of sources subject to Subpart CC of 40 CFR Part 63.

2.j In accordance with 40 CFR Part 63, Subpart CC, the permittee shall comply with the applicable equipment leak provisions of 40 CFR Part 60, Subpart VV [see sections A.I, A.II, A.III, A.IV, and A.V in Part II of this permit that refers to Subpart VV] and paragraph (b) of 40 CFR 63.648 [see section A.II in Part II of this permit] (except as provided in paragraphs (a)(1), (a)(2), and (c) through (i) of 40 CFR 63.648).

2.k The permittee shall comply with the emission limitations and work practice standards for existing sources in 40 CFR Part 63, Subpart UUU by no later than April 11, 2005 unless an extension of compliance is granted under 40 CFR 63.1563(c).

2.l The permittee must meet the notification requirements in 40 CFR 63.1574 [see section A.IV] according to the schedule in 40 CFR 63.1574 and in 40 CFR Part 63, Subpart A. Some of the notifications must be submitted before the date the permittee is required to comply with the emission limitations and work practice standards in 40 CFR Part 63, Subpart UUU.

2.m The permittee must meet each emission limitation in Table 29 of this subpart that applies to this emissions unit. The permittee shall meet the requirements for NSPS units.

2.n Table 44 of [see section A.VI] shows which parts of the General Provision in 40 CFR 63.1 through 63.15 apply to this emissions unit.

2o [63.1569(a)(1)] HAP EMISSIONS FROM BYPASS LINES
The permittee must meet each work practice standard in Table 36 [see section A.VI] that applies to this emissions unit. The permittee can choose from the four following options:

i. [63.1569(a)(1)(i)]
The permittee can elect to install an automated system (Option 1);

ii. [63.1569(a)(1)(ii)]
The permittee can elect to use a manual lock system (Option 2);

iii. [63.1569(a)(1)(iii)]
The permittee can elect to seal the line (Option 3); or

iv. [63.1569(a)(1)(iv)]
The permittee can elect to vent to a control device (Option 4).

2.p [63.1569(a)(2)]
As provided in 40 CFR 63.6(g), the U.S. EPA, may choose to grant the permittee permission to use an alternative to the work practice standard in 63.1569(a)(1) [see section A.I.2].

## II. Operational Restrictions

1. A pilot flame shall be maintained at all times in the flare's pilot light burner.

2. [OAC rule 3745-31-05(D) as established by PTI 04-1046]
The permittee shall continue to implement and maintain the Preventive Maintenance and Malfunction Abatement Plan (PMMAP) for this emissions unit. The plan may be revised and resubmitted in the future subject to Ohio EPA review and comment. The comprehensive plan shall include, but not be limited to, the following:

   a. an identification of events, within the SRU or Tail Gas Treater or upstream/downstream units/operations, likely to cause malfunctions and/or non-routine shutdowns or bypasses of the SRU or Tail Gas Treater, and a description of the steps taken to prevent or minimize the likelihood of such events from occurring;

   b. a description of steps or procedures reasonably available to be taken in order to prevent or minimize flaring of feeds to the SRUs during any period when one or more SRUs is shutdown or being bypassed, along with an indication of limitations on the availability of such steps;

   c. a description of steps to be taken to minimize excess emissions from the SRUs during routine or scheduled startups and shutdowns of the SRUs and Tail Gas Treater;

   d. a comprehensive preventive maintenance program, including a description of the items or conditions that will be inspected, the frequency of these inspections or repairs, and an identification of the types and quantities of replacement parts which will be maintained in inventory for quick replacement;

   e. an identification of the emissions unit and the operating outlet variables of the air pollution control equipment that will be monitored in order to detect a malfunction or failure, the normal operating range of these variables, and a description of the monitoring or surveillance procedures and of the method of informing operating personnel of any malfunction, including alarm systems, lights and/or other indicators; and,

   f. a description of the corrective procedures that will be taken in the event of a malfunction or failure in order to achieve compliance with any applicable law or permit limit as expeditiously as practicable.

2. [40 CFR Part 63, Subpart UUU]
The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward.

   a. [63.1568(a)] REQUIREMENTS FOR HAP EMISSIONS FROM SULFUR RECOVERY UNITS

      i. [63.1568(a)(2)]

The permittee must meet each operating limit in Table 30 [see section A.VI] that applies to this emissions unit.

ii. [63.1568(a)(3)]
The permittee must prepare an operation, maintenance, and monitoring plan according to the requirements in 40 CFR 63.1574(f) [see section A.IV] and operate at all times according to the procedures in the plan.

b. [63.1569(a)(3)] REQUIREMENTS FOR HAP EMISSIONS FROM BYPASS LINES
The permittee must prepare an operation, maintenance, and monitoring plan according to the requirements in 40 CFR 63.1574(f) [see section A.IV] and operate at all times according to the procedures in the plan.

## III. Monitoring and/or Record Keeping Requirements

1. $SO_2$ Continuous Emissions Monitoring System

a. The permittee shall operate and maintain an instrument for continuously monitoring and recording the concentration (dry basis, zero percent excess air) of $SO_2$ emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.

i. The span values for this monitor are 500 ppm $SO_2$ and 25 percent O2.

ii. The performance evaluations for this $SO_2$ monitor under 40 CFR 60.13(c) shall use Performance Specification 2. Methods 6 or 6C and 3 or 3A shall be used for conducting the relative accuracy evaluations.

b. The permittee must automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in Appendix B of 40 CFR Part 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

c. Monitors that automatically adjust the data to the corrected calibration values (e.g., microprocessor control) must be programmed to record the unadjusted concentration measured in the CD prior to resetting the calibration, if performed, or record the amount of adjustment.

d. If either the zero (or low-level) or high-level CD result exceeds twice the applicable drift specification in Appendix B for five, consecutive, daily periods, the CEMS is out-of-control. If either the zero (or low-level) or high-level CD result exceeds four times the applicable drift specification in 40 CFR Part 60, Appendix B during any CD check, the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action. Following corrective action, repeat the CD checks.

e. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required in 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: the continuous monitoring system for measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

f. One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit.

g. The permittee must implement a quality control program. As a minimum, each quality control program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

i. Calibration of CEMS.
ii. CD determination and adjustment of CEMS.
iii. Preventive maintenance of CEMS (including spare parts inventory).
iv. Data recording, calculations, and reporting.
v. Accuracy audit procedures including sampling and analysis methods.
vi. Program of corrective action for malfunctioning CEMS.

As described in Section 5.2 of 40 CFR Part 60, Appendix F Procedure 1, whenever excessive inaccuracies occur for two consecutive quarters, the source permittee must revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

h. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

2. The permittee shall monitor and record the hourly and thermal oxidizer monthly average firing rate in terms of standard cubic feet per hour and the daily. From this data, the permittee shall calculate and record the monthly and rolling 12-month total CO, $NO_x$ and particulate emissions in accordance with Section A.V.

3. The permittee shall monitor and record the monthly average stack oxygen content, fuel gas rate, and tail gas treater vent gas rate to the thermal oxidizer, and determine the monthly total gas flow. In addition, the permittee shall calculate and record the monthly average $SO_2$ concentration in the SRU stack from the data recorded by the continuous emission monitor. From these data, the permittee shall calculate and record the monthly total $SO_2$ emissions for that month and the 12-month, rolling summation of the monthly emissions in accordance with the procedures specified in A.V.

4. Emissions occurring during any malfunction, bypassing, startup or shutdown period shall be quantified and recorded.

5. For purposes of these monitoring and record keeping requirements, average daily and monthly gas flow rates shall be determined from data provided by continuous gas flow monitors, except that, in the event of a monitor malfunction, flow rate may be estimated based on historical data corresponding to the production rate of the emissions unit for the period of monitor malfunction. The monitor shall be repaired as soon as possible. Average fuel gas heat content shall be determined through analysis of grab samples of the fuel gas collected once per day where the limit of concern is expressed as an hourly number and no less than once per week where the limit is expressed as a 12-month, rolling total.

6. The permittee shall properly install, operate and maintain a device to continuously monitor the presence of the flare pilot flame when the emissions unit is in operation. The monitoring device and any recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

   For each day the emissions unit is in operation, the permittee shall record all periods during which there was no flare pilot flame or the monitoring equipment was not operating.

7. [OAC rule 3745-31-05(D) as established by PTI 04-1046]
   The permittee shall maintain records to verify that the Preventive Maintenance and Malfunction Abatement Plan is being implemented and the content of the of the PMMAP has been met.

8. [40 CFR Part 63, Subpart UUU]
   The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward.

   a. [63.1570] GENERAL COMPLIANCE REQUIREMENTS - 40 CFR Part 63, Subpart UUU

      i. [63.1570(a)]
      The permittee must be in compliance with all of the non-opacity standards in this subpart during the times specified in 40 CFR 63.6(f)(1).

      ii. [63.1570(c)]
      The permittee must always operate and maintain the affected source, including air pollution control and monitoring equipment, according to the provisions in 40 CFR 63.6(e)(1)(i). During the period between April 11, 2005 and the date upon

which continuous monitoring systems have been installed and validated and any applicable operating limits have been set, the permittee must maintain a log detailing the operation and maintenance of the process and emissions control equipment.

iii. [63.1570(d)]
The permittee must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in 40 CFR 63.6(e)(3).

iv. [63.1570(e)]
During periods of startup, shutdown, and malfunction, the permittee must operate in accordance with the SSMP.

v. [63.1570(f)]
The permittee must report each instance in which each emission limitation that was not met and each applicable operating limit in 40 CFR Part 63, Subpart UUU that was not met. This includes periods of startup, shutdown, and malfunction. The permittee also must report each instance in which the applicable work practice standards in 40 CFR Part 63, Subpart UUU that were not met. These instances are deviations from the emission limitations and work practice standards in this subpart. These deviations must be reported according to the requirements in 40 CFR 63.1575 [see section A.IV].

vi. [63.1570(g)]
Consistent with 40 CFR 63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if the permittee demonstrates to the Administrator's satisfaction that the permittee was operating in accordance with the SSMP. The SSMP must require that good air pollution control practices are used during those periods. The plan must also include elements designed to minimize the frequency of such periods (i.e., root cause analysis). The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in 40 CFR 63.6(e) and the contents of the SSMP.

b. [63.1572] MONITORING, INSTALLATION, OPERATION, AND MAINTENANCE REQUIREMENTS [Tables 40 and 41] - 40 CFR Part 63, Subpart UUU

i. [63.1572(a)]
The permittee must install, operate, and maintain each continuous emission monitoring system according to the requirements in 40 CFR 63.1572(a)(1) through (4) [See Section A.III].

(a) [63.1572(a)(1)]
The permittee must install, operate, and maintain each continuous emission monitoring system according to the requirements in Table 40 [see section A.VI].

(b) [63.1572(a)(3)]
As specified in 40 CFR 63.8(c)(4)(ii), each continuous emission monitoring system must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(c) [63.1572(a)(4)]
Data must be reduced as specified in 40 CFR 63.8(g)(2).

ii. [63.1572(c)]
The permittee must install, operate, and maintain each continuous parameter monitoring system according to the following paragraphs of this section.

(a) [63.1572(c)(1)]
Each continuous parameter monitoring system must be installed, operated, and maintained according to the requirements in Table 41 [see section A.VI] and in a manner consistent with the manufacturer's specifications or other written procedures that provide adequate assurance that the equipment will monitor accurately.

(b) [63.1572(c)(2)]
The continuous parameter monitoring system must complete a minimum of one cycle of operation for each successive 15-minute period. The permittee must have a minimum of four successive cycles of operation to have a valid hour of data (or at least two if a calibration check is performed during that hour or if the continuous parameter monitoring system is out-of-control).

(c) [63.1572(c)(3)]
Each continuous parameter monitoring system must have valid hourly average data from at least 75 percent of the hours during which the process operated.

(d) [63.1572(c)(4)]
Each continuous parameter monitoring system must determine and record the hourly average of all recorded readings and if applicable, the daily average of all recorded readings for each operating day. The daily average must cover a 24-hour period if operation is continuous or the number of hours of operation per day if operation is not continuous.

(e) [63.1572(c)(5)]
Each continuous parameter monitoring system must record the results of each inspection, calibration, and validation check.

iii. [63.1572(d)]
The permittee must monitor and collect data according to the requirements in 40 CFR 63.1572(d)(1) and (d)(2) [see section A.III].

(a) [63.1572(d)(1)]
Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), the permittee must conduct all monitoring in continuous operation (or collect data at all required intervals) at all times the affected unit is operating.

(b) [63.1572(d)(2)]
The permittee may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities for purposes of this regulation, including data averages and calculations, for fulfilling a minimum data availability requirement, if applicable. The permittee must use all the data collected during all other periods in assessing the operation of the control device and associated control system.

c. [63.1573] MONITORING ALTERNATIVES - 40 CFR Part 63, Subpart UUU

i. [63.1573(c)] USING ANOTHER TYPE OF MONITORING SYSTEM
The permittee may request approval from the permitting authority to use an automated data compression system. An automated data compression system does not record monitored operating parameter values at a set frequency (e.g., once every hour) but records all values that meet set criteria for variation from previously recorded values. The permittee's request must contain a description of the monitoring system and data recording system, including the criteria used to determine which monitored values are recorded and retained, the method for calculating daily averages, and a demonstration that the system meets all of the criteria in 40 CFR 63.1576(c)(1) through (5) [See Section A.III]:

(a) [63.1573(c)(1)]
The system measures the operating parameter value at least once every hour;

(b) [63.1573(c)(2)]
The system records at least 24 values each day during periods of operation;

(c) [63.1573(c)(3)]
The system records the date and time when monitors are turned off or on;

(d) [63.1573(c)(4)]
The system recognizes unchanging data that may indicate the monitor is not functioning properly, alerts the operator, and records the incident; and

(e) [63.1573(c)(5)]
The system computes daily average values of the monitored operating parameter based on recorded data.

ii. [63.1573(d)] REQUESTING MONITORING ALTERNATIVES
The permittee may request approval to monitor parameters other than those required in this subpart. The permittee must request approval if:

(a) [63.1573(d)(1)]
The permittee uses a control device other than a thermal incinerator, boiler, process heater, flare, electrostatic precipitator, or wet scrubber;

(b) [63.1573(d)(2)]
The permittee uses a combustion control device (e.g., incinerator, flare, boiler or process heater with a design heat capacity of at least 44 MW, boiler or process heater where the vent stream is introduced into the flame zone), electrostatic precipitator, or scrubber but wants to monitor a parameter other than those specified; or

(c) [63.1573(d)(3)]
The permittee wishes to use another type of continuous emission monitoring system that provides direct measurement of a pollutant (i.e., a PM or multi-metals HAP continuous emission monitoring system, a carbonyl sulfide/carbon disulfide continuous emission monitoring system, a TOC continuous emission monitoring system, or HCl continuous emission monitoring system).

iii. [63.1573(e)] REQUESTING MONITOR ALTERNATIVE PARAMETERS
The permittee must submit a request for review and approval or disapproval to the Administrator of the EPA. The request must include the information in 63.1573 (e)(1) through (5) [See Section A.III].

(a) [63.1573(e)(1)]
A description of each affected source and the parameter(s) to be monitored to determine whether the affected source will continuously comply with the emission limitations and an explanation of the criteria used to select the parameter(s).

(b) [63.1573(e)(2)]
A description of the methods and procedures that will be used to demonstrate that the parameter can be used to determine whether the affected source will continuously comply with the emission limitations and the schedule for this demonstration. The permittee must certify that an operating limit will be established for the monitored parameter(s) that represents the conditions in existence when the control device is being properly operated and maintained to meet the emission limitation.

(c) [63.1573(e)(3)]
The frequency and content of monitoring, recording, and reporting, if monitoring and recording are not continuous. The permittee also must

include the rationale for the proposed monitoring, recording, and reporting requirements.

(d) [63.1573(e)(4)]
Supporting calculations.

(e) [63.1573(e)(5)]
Averaging time for the alternative operating parameter.

d. [63.1576] RECORD KEEPING REQUIREMENTS - 40 CFR Part 63, Subpart UUU

i. [63.1576(a)]
The permittee must keep the records specified in 63.1576(a)(1) through (3) [See Section A.III].

(a) [63.1576(a)(1)]
A copy of each notification and report that the permittee submitted to comply with this subpart, including all documentation supporting any initial notification or Notification of Compliance Status that the permittee submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv).

(b) [63.1576(a)(2)]
The records in 40 CFR 63.6(e)(1)(iii) through (v) related to startup, shutdown, and malfunction.

(c) [63.1576(a)(3)]
Records of performance tests, performance evaluations, and visible emission observations as required in 40 CFR 63.10(b)(2)(viii).

ii. [63.1576(b)]
For each continuous emission monitoring system, the permittee must keep the records required in 63.1576(b)(1) through (5) [See Section A.III].

(a) [63.1576(b)(1)]
Records described in 40 CFR 63.10(b)(2)(vi) through (xi) of Subpart A.

(b) [63.1576(b)(3)]
Previous (i.e., superceded) versions of the performance evaluation plan as required in 40 CFR 63.8(d)(3) of Subpart A.

(c) [63.1576(b)(4)]
Requests for alternatives to the relative accuracy test for continuous emission monitoring systems as required in 40 CFR 63.8(f)(6)(i) of Subpart A.

(d) [63.1576(b)(5)]

Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

iii. [63.1576(d)]
The permittee must keep records required by Tables 34 and 35 [see section A.VI] (for sulfur recovery units) and Table 39 [see section A.VI] (for bypass lines) to show continuous compliance with each emission limitation that applies to this emissions unit.

iv. [63.1576(e)]
The permittee must keep a current copy of the operation, maintenance, and monitoring plan onsite and available for inspection. The permittee also must keep records to show continuous compliance with the procedures in the operation, maintenance, and monitoring plan.

v. [63.1576(f)]
The permittee also must keep the records of any changes that affect emission control system performance including, but not limited to, the location at which the vent stream is introduced into the flame zone for a boiler or process heater.

vi. [63.1576(g)]
The records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1).

vii. [63.1576(h)]
As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

viii. [63.1576(i)]
The permittee must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee can keep the records offsite for the remaining 3 years.

9. Except as otherwise provided above, all records required under Section A.III of this permit shall be maintained in accordance with the Monitoring and Related Record Keeping Requirements of Part ***I*** - General Terms and Conditions.

## IV. Reporting Requirements

1. $SO_2$ Continuous Emissions Monitoring System Reporting Requirements

a. The permittee shall submit an $SO_2$ excess emissions and monitoring systems performance report and/or a summary report form to the Toledo Division of Environmental Services quarterly, or except when the Administrator of USEPA, on a case-by-case basis,

determines that more frequent reporting is necessary to accurately assess the compliance status of the emissions unit. All reports shall be postmarked by the 30th day following the end of each three-month period. Excess emissions are each rolling 3-hour average concentration greater than 250 ppm by volume (dry basis) of $SO_2$ at zero percent excess air. Written reports of excess emissions shall include the following information:

i. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

ii. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

iii. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

iv. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

b. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7 unless otherwise specified by the Administrator of USEPA. One summary report form shall be submitted for each pollutant monitored at each affected facility.

i. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator of USEPA.

ii. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

c. The permittee shall submit a quarterly report for each CEMS the accuracy results from Section 6 and the CD assessment results from Section 4 of 40 CFR Part 60 Appendix F Procedure 1. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of

emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the following information:

i. Permittee name and address.
ii. Identification and location of monitors in the CEMS.
iii. Manufacturer and model number of each monitor in the CEMS.
iv. Assessment of CEMS data accuracy and date of assessment as determined by a RATA, RAA, or CGA described in Section 5 of 40 CFR Part 60 Appendix F Procedure 1 including the RA for the RATA, the A for the RAA or CGA, the RM results, the cylinder gases certified values, the CEMS responses, and the calculations results as defined in Section 6. If the accuracy audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.
v. Results from USEPA performance audit samples described in Section 5 and the applicable RM's.
vi. Summary of all corrective actions taken when CEMS was determined out-of-control, as described in Sections 4 and 5 of 40 CFR Part 60 Appendix F Procedure 1.

An example of a DAR format is shown in Figure 1 of 40 CFR Part 60 Appendix F, Procedure 1.

2. The permittee shall submit deviation (excursion) reports, that identify all periods during which the pilot flame was not present. The reports shall include the date, time, and duration of each time period. These reports shall be submitted according

3. [40 CFR Part 63, Subpart UUU]
The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward except as stated in 40 CFR 63.1574 which may have reports due before April 11, 2005.

a. [63.1574] NOTIFICATION SUBMITTAL - 40 CFR Part 63, Subpart UUU

i. [63.1574(a)]
Except as allowed in 40 CFR 63.1574(a)(1) through (a)(3) [See Section A.IV], the permittee must submit all of the notifications in 40 CFR 63.6(h), 63.7(b) and (c), 63.8(e), 63.8(f)(4), 63.8(f)(6), and 63.9(b) through (h) that apply to this emissions unit by the dates specified.

(a) [63.1574(a)(1)]
The permittee must submit the notification of the intention to construct or reconstruct according to 40 CFR 63.9(b)(5). This deadline also applies to the application for approval of construction or reconstruction and approval of construction or reconstruction based on State preconstruction review required in 40 CFR 63.5(d)(1)(i) and 63.5(f)(2).

(b) [63.1574(a)(2)]

The permittee must submit the notification of intent to conduct a performance test required in 40 CFR 63.7(b) at least 30 calendar days before the performance test is scheduled to begin (instead of 60 days).

(c) [63.1574(a)(3)]
If the permittee is required to conduct a performance test, performance evaluation, design evaluation, visible emission observation, or other initial compliance demonstration, the permittee must submit a notification of compliance status according to 40 CFR 63.9(h)(2)(ii). The permittee can submit this information in an operating permit application, in an amendment to an operating permit application, in a separate submission, or in any combination. If the required information has been submitted previously, the permittee does not have to provide a separate notification of compliance status. Just refer to the earlier submissions instead of duplicating and resubmitting the previously submitted information.

(i) [63.1574(a)(3)(i)]
For each initial compliance demonstration that does not include a performance test, the permittee must submit the Notification of Compliance Status no later than 30 calendar days following completion of the initial compliance demonstration.

(b) [63.1574(a)(3)(ii)]
For each initial compliance demonstration that includes a performance test, the permittee must submit the notification of compliance status, including the performance test results, no later than 150 calendar days after April 11, 2005.

ii. [63.1574(c)]
As specified in 40 CFR 63.9(b)(3), if the permittee starts the new or reconstructed affected source on or after April 11, 2002, the permittee must submit the initial notification no later than 120 days after April 11, 2005.

iii. [63.1574(d)]
The permittee also must include the information in Table 42 [see section A.VI] in the notification of compliance status.

iv. [63.1574(f)]
As required by 40 CFR Part 63, Subpart UUU, the permittee must prepare and implement an operation, maintenance, and monitoring plan for each affected source, control system, and continuous monitoring system. The purpose of this plan is to detail the operation, maintenance, and monitoring procedures that the permittee will follow.

(a) [63.1574(f)(1)]
The permittee must submit the plan to the Toledo Division of Environmental Services for review and approval along with the notification of compliance status. While the permittee does not have to

include the entire plan in the part 70 or 71 permit, the permittee must include the duty to prepare and implement the plan as an applicable requirement in the part 70 or 71 operating permit. The permittee must submit any changes to the Toledo Division of Environmental Services for review and approval and comply with the plan until the change is approved.

(b) [63.1574(f)(2)]
Each plan must include, at a minimum, the applicable information as specified in 40 CFR 63.1574(f)(2)(i) through (x) [See Section A.IV].

(i) [63.1574(f)(2)(i)]
Process and control device parameters to be monitored for each affected source, along with established operating limits.

(ii) [63.1574(f)(2)(ii)]
Procedures for monitoring emissions and process and control device operating parameters for each affected source.

(iii) [63.1574(f)(2)(viii)]
Monitoring schedule, including when the permittee will monitor and will not monitor an affected emissions unit (e.g., during the coke burn-off, regeneration process).

(iv) [63.1574(f)(2)(ix)]
Quality control plan for each continuous emission monitoring system used to meet an emission limit in this subpart. This plan must include procedures used for calibrations, accuracy audits, and adjustments to the system needed to meet applicable requirements for the system.

(v) [63.1574(f)(2)(x)]
Maintenance schedule for each affected emissions unit, monitoring system, and control device that is generally consistent with the manufacturer's instructions for routine and long-term maintenance.

b. [63.1575] REPORTS FOR 40 CFR Part 63, Subpart UUU

i. [63.1575(a)]
The permittee must submit each report in Table 43 [see section A.VI] that applies to this emissions unit.

ii. [63.1575(b)]
Unless the Administrator has approved a different schedule, the permittee must submit each report by the date in Table 43 [see section A.VI] and according to the requirements in 40 CFR 63.1575(b)(1) through (b)(5) [see section A.IV].

(a) [63.1575(b)(1)]
The first compliance report must cover the period beginning April 11, 2005 and ending on June 30, 2005.

(b) [63.1575(b)(2)]

The first compliance report must be postmarked or delivered no later than July 31, 2005.

(c) [63.1575(b)(3)]
Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(d) [63.1575(b)(4)]
Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(e) [63.1575(b)(5)]
For each affected emissions unit that is subject to permitting regulations pursuant to 40 CFR Part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A), the permittee may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in 63.1575(b)(1) through (b)(4) [see section A.IV].

iii. 63.1575(c)]
The compliance report must contain the following information:

(a) [63.1575(c)(1)]
Company name and address.

(b) [63.1575(c)(2)]
Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

(c) [63.1575(c)(3)]
Date of report and beginning and ending dates of the reporting period.

(d) [63.1575(c)(4)]
If there are no deviations from any emission limitation that applies to this emissions unit and there are no deviations from the requirements for work practice standards, a statement that there were no deviations from the emission limitations or work practice standards during the reporting period and that no continuous emission monitoring system or continuous opacity monitoring system was inoperative, inactive, malfunctioning, out-of-control, repaired, or adjusted.

iv. [63.1575(d)]
For each deviation from an emission limitation and for each deviation from the requirements for work practice standards that occurs at an affected emissions unit

where a continuous opacity monitoring system or a continuous emission monitoring system is not used to comply with the emission limitation or work practice standard in 40 CFR Part 63, Subpart UUU, the compliance report must contain the information in 63.1575(c)(1) through (c)(3) [See Section A.IV] and the information in 63.1575(d)(1) through (d)(3) [See Section A.IV].

(a) [63.1575(d)(1)]
The total operating time of each affected emissions unit during the reporting period.

(b) [63.1575(d)(2)]
Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(c) [63.1575(d)(3)]
Information on the number, duration, and cause for monitor downtime incidents (including unknown cause, if applicable, other than downtime associated with zero and span and other daily calibration checks).

v. [63.1575(e)]
For each deviation from an emission limitation occurring at an affected source where a continuous emission monitoring system is used to comply with the emission limitation, the permittee must include the information in 40 CFR 63.1575(d)(1) through(3) [See Section A.IV] and the information in 63.1575(e)(1) through (13) [See Section A.IV].

(a) [63.1575(e)(1)]
The date and time that each malfunction started and stopped.

(b) [63.1575(e)(2)]
The date and time that each continuous emission monitoring system was inoperative, except for zero (low-level) and high-level checks.

(c) [63.1575(e)(3)]
The date and time that each continuous emission monitoring system was out-of-control, including the information in 40 CFR 63.8(c)(8) of Subpart A.

(d) [63.1575(e)(4)]
The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(e) [63.1575(e)(5)]
A summary of the total duration of the deviation during the reporting period (recorded in hours for gases and in the averaging period specified in

the regulation for other types of emission limitations), and the total duration as a percent of the total source operating time during that reporting period.

(f) [63.1575(e)(6)]
A breakdown of the total duration of the deviations during the reporting period and into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(g) [63.1575(e)(7)]
A ummary of the total duration of downtime for the continuous emission monitoring system during the reporting period (recorded in minutes for opacity and hours for gases and in the averaging time specified in the regulation for other types of standards), and the total duration of downtime for continuous emission monitoring system as a percent of the total source operating time during that reporting period.

(h) [63.1575(e)(8)]
A breakdown of the total duration of downtime for the continuous emission monitoring system during the reporting period into periods that are due to monitoring equipment malfunctions, non-monitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes, and other unknown causes.

(i) [63.1575(e)(9)]
An identification of each HAP that was monitored at the affected source.

(j) [63.1575(e)(10)]
A brief description of the process units.

(k) [63.1575(e)(11)]
The monitoring equipment manufacturer(s) and model number(s).

(l) [63.1575(e)(12)]
The date of the latest certification or audit for the continuous emission monitoring system.

(m) [63.1575(e)(13)]
A description of any change in the continuous emission monitoring system, processes, or controls since the last reporting period.

vi. [63.1575(f)]
The permittee also must include the information required in 63.1575(f)(1) through (f)(2) [See Section A.IV] in each compliance report, if applicable.

(a) [63.1575(f)(1)]

A copy of any performance test done during the reporting period on any affected unit. The report may be included in the next semiannual report. The copy must include a complete report for each test method used for a particular kind of emission point tested. For additional tests performed for a similar emission point using the same method, the permittee must submit the results and any other information required, but a complete test report is not required. A complete test report contains a brief process description; a simplified flow diagram showing affected processes, control equipment, and sampling point locations; sampling site data; description of sampling and analysis procedures and any modifications to standard procedures; quality assurance procedures; record of operating conditions during the test; record of preparation of standards; record of calibrations; raw data sheets for field sampling; raw data sheets for field and laboratory analyses; documentation of calculations; and any other information required by the test method.

(b) [63.1575(f)(2)]
Any requested change in the applicability of an emission standard (e.g., changing from the PM standard to the Ni standard for catalytic cracking units or from the HCl concentration standard to percent reduction for catalytic reforming units) in the periodic report. The permittee must include all information and data necessary to demonstrate compliance with the new emission standard selected and any other associated requirements.

vii. [63.1575(g)]
The permittee may submit reports required by other regulations in place of or as part of the compliance report if they contain the required information.

viii. [63.1575(h)]
The reporting requirements in paragraphs 63.1575(h)(1) and (2) [See Section A.IV] apply to startups, shutdowns, and malfunctions:

(a) [63.1575(h)(1)]
When actions taken to respond are consistent with the plan, the permittee is not required to report these events in the semiannual compliance report and the reporting requirements in 40 CFR 63.6(e)(3)(iii) and 63.10(d)(5) do not apply.

(b) [63.1575(h)(2)]
When actions taken to respond are not consistent with the plan, the permittee must report these events and the response taken in the semiannual compliance report. In this case, the reporting requirements in 40 CFR 63.6(e)(3)(iv) and 63.10(d)(5) do not apply.

4. General Reporting Requirements

a. All requests, reports, applications, submittals, and other communications pursuant to this permit shall be submitted to: Toledo Division of Environmental Services, Air Resources Section, 348 South Erie Street, Toledo, Ohio 43602-1633.

b. All requests, reports, applications, submittals, and other communications to the Administrator pursuant to this permit shall be submitted to: Director Ohio EPA c/o Bob Hodanbosi, Ohio EPA, Lazarus Government Center, P.O. Box 1049, Columbus, OH 43216-1049.

c. If any State requires a submittal that contains all the information required in an application, notification, request, report, statement, or other communication required in this part, the permittee may send the appropriate Regional Office of the EPA a copy of that submittal to satisfy the requirements of this part for that communication.

If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

## V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

2.7 lbs/hr CO

Applicable Compliance Method:

Multiply the AP-42 emission factor (Table 1.4-1 dated July 1998) of 84 lb/MMSCF of fuel gas burned corrected for heating value by the actual fuel gas burned in MMSCF/hr (average monthly fuel gas burned is acceptable). If required, Methods 1 through 4 and Method 10 shall be used to demonstrate compliance. Alternative USEPA approved test methods may be used with prior approval from the Ohio EPA.

b. Emission Limitation:

8.07 tons/yr CO as a rolling 12-month summation

Applicable Compliance Method:

Multiply the lbs/hr CO as determined above by the number of hours operated per month to determine the monthly CO emissions. Add the monthly total to the total for the previous 11 months to determine the rolling, 12-month total CO emissions.

c. Emission Limitation:

4.4 lbs/hr $NO_x$

Applicable Compliance Method:

Multiply the manufacturer's guaranteed low-$NO_x$ burner emission factor of 0.10 lb/MMBtu of fuel gas burned by the actual fuel gas burned in MMBtu/hr (average monthly fuel gas burned is acceptable) to determine the hourly CO emissions. If required, Methods 1 through 4 and Method 7E shall be used to demonstrate compliance. Alternative USEPA approved test methods may be used with prior approval from the Ohio EPA.

d. Emission Limitation:

12.76 tons/yr $NO_x$ as a rolling 12-month summation

Applicable Compliance Method:

Multiply the lbs/hr $NO_x$ as determined above by the number of hours operated per month to determine the monthly $NO_x$ emissions. Add the monthly total to the total for the previous 11 months to determine the rolling, 12-month total $NO_x$ emissions.

e. Emission Limitation:

0.6 lb/hr particulate emissions

Applicable Compliance Method:

Multiply the AP-42 emission factor (Table 1.4-1 dated July 1998) of 7.6 lb/MMSCF of fuel gas burned corrected for heating value by the actual fuel gas burned in MMSCF/hr (average monthly fuel gas burned is acceptable). If required, Methods 1 through 4 and Method 5 shall be used to demonstrate compliance. Alternative USEPA approved test methods may be used with prior approval from the Ohio EPA.

f. Emission Limitation:

1.74 tons/yr particulate emissions as a rolling 12-month summation

Applicable Compliance Method:

Multiply the lbs/hr particulate emissions as determined above by the number of hours operated per month to determine the monthly particulate emissions. Add the monthly total to the total for the previous 11 months to determine the rolling, 12-month total particulate emissions.

g. Emission Limitation:

250 ppm by volume (dry basis) of $SO_2$ at zero percent excess air

Applicable Compliance Method:

The monitoring and record keeping requirements of A.III shall be used to demonstrate compliance. If required, the procedures outlined under 40 CFR 60.106(f) shall be used to demonstrate compliance.

h. Emission Limitation:

172 tons/yr $SO_2$ as a rolling, 12-month summation;

Applicable Compliance Method:

Multiply the monthly average $SO_2$ concentration from the CEM by the monthly total gas flow to determine the monthly total $SO_2$ emissions.

i. Emission Limitation:

6.2 tons/yr VOC as a rolling, 12-month summation (from fugitive equipment leaks)

Applicable Compliance Method:

Compliance shall be determined by multiplying the number of components determined to be leaking under Part II Section A.III of this permit by the corresponding leak screening value correlation, multiplied by 2.2 lbs/kg, multiplied by the number of hours leaking per month, and divided by 2000 lbs/ton to obtain the VOC emission rate in tons per month for each type of leaking component. The leak screening values are listed in tables 2-10 and 2-14 of Protocol for Equipment Leak Emission Estimates (EPA document 453/R-95-017 or subsequent updates). Sum the monthly total emissions from all types of leaking components and add this value to the total for the previous 11 months to determine the 12-month total VOC emissions in tons.

2. Each CEMS must be audited at least once each calendar quarter. Successive quarterly audits shall occur no closer than 2 months. The audits shall be conducted as follows:

a. Relative Accuracy Test Audit (RATA). The RATA must be conducted at least once every four calendar quarters. Conduct the RATA as described for the RA test procedure in the applicable PS in Appendix B (e.g., PS 2 for $SO_2$ and $NO_X$). In addition, analyze the appropriate performance audit samples received from USEPA as described in the applicable sampling methods (e.g., Methods 6 and 7).

i. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Toledo Division of Environmental Services's refusal to accept the results of the emission test(s).

ii. Personnel from the Toledo Division of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

b. Cylinder Gas Audit (CGA). If applicable, a CGA may be conducted in three of four calendar quarters, but in no more than three quarters in succession.

c. Relative Accuracy Audit (RAA). The RAA may be conducted three of four calendar quarters, but in no more than three quarters in succession. To conduct a RAA, follow the procedure described in the applicable PS in Appendix B for the relative accuracy test, except that only three sets of measurement data are required. Analyses of USEPA performance audit samples are also required.

3. [40 CFR Part 63, Subpart UUU]
The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward, however the initial testing may need to be done before that date.

a. [63.1568] DEMONSTRATING COMPLIANCE WITH THE WORK PRACTICE STANDARDS AND EMISSION LIMITATIONS FROM SULFUR RECOVERY UNITS

i. [63.1568(b)] DEMONSTRATING INITIAL COMPLIANCE
The permittee must:

(a) [63.1568(b)(1)]
Install, operate, and maintain a continuous monitoring system according to the requirements in 40 CFR 63.1572 [see section A.III] and Table 31 [see section A.VI].

(b) [63.1568(b)(3)]
Establish each site-specific operating limit in Table 30 [see section A.VI.] that applies to this emissions unit according to the procedures in Table 32 [see section A.VI].

(c) [63.1568(b)(4)]
Correct the reduced sulfur samples to zero percent excess air using Equation 1 of this section as follows:

(Eq. 1) [illegible]

Where:
$C_{adj}$ = pollutant concentration adjusted to zero percent oxygen, ppm or g/dscm;
$C_{meas}$ = pollutant concentration measured on a dry basis, ppm or g/dscm;

$20.9_c$ = 20.9 percent oxygen—0.0 percent oxygen (defined oxygen correction basis), percent;
20.9 = oxygen concentration in air, percent;
$\%O_2$ = oxygen concentration measured on a dry basis, percent.

(d) [63.1568(b)(5)]
Demonstrate initial compliance with each emission limitation that applies to this emissions unit according to Table 33 [see section A.VI].

(e) [63.1568(b)(6)]
Demonstrate initial compliance with the work practice standard in 63.1568(a)(3) [see section A.II] by submitting the operation, maintenance, and monitoring plan to the Toledo Division of Environmental Services as part of the notification of compliance status.

(f) [63.1568(b)(7)]
Submit the notification of compliance status containing the results of the initial compliance demonstration according to the requirements in 40 CFR 63.1574 [see section A.IV].

ii. [63.1568(c)] DEMONSTRATING CONTINUOUS COMPLIANCE
The permittee must

(a) [63.1568(c)(1)]
Demonstrate continuous compliance with each emission limitation in Tables 29 and 30 of this subpart that applies to this emissions unit according to the methods specified in Tables 34 and 35 of this subpart.

(b) [63.1568(c)(2)]
Demonstrate continuous compliance with the work practice standard in 63.1568(a)(3) [see section A.II] by complying with the procedures in the operation, maintenance, and monitoring plan.

b. [63.1569(b)] DEMONSTRATING INITIAL COMPLIANCE WITH THE HAP EMISSION LIMITATIONS FROM BYPASS LINES - 40 CFR Part 63, Subpart UUU

i. [63.1569(b)(1)]
If the permittee elects the option in 63.1569(a)(1)(i) [see section A.I.2], the permittee must conduct each performance test for a bypass line according to the requirements in 40 CFR 63.1571 [see section A.V] and under the conditions specified in Table 37 [see section A.VI].

ii. [63.1569(b)(2)]
The permittee must demonstrate initial compliance with each work practice standard in Table 36 [see section A.VI] that applies to this emissions unit according to Table 38 [see section A.VI.].

iii. [63.1569(b)(3)]
The permittee must demonstrate initial compliance with the work practice standard in 63.1569(a)(3) [see section A.II] by submitting the operation, maintenance, and monitoring plan to the Toledo Division of Environmental Services as part of the notification of compliance status.

iv. [63.1569(b)(4)]
The permittee must submit the notification of compliance status containing the results of the initial compliance demonstration according to the requirements in 40 CFR 63.1574 [see section A.IV].

c. [63.1569(c)] DEMONSTRATING CONTINUOUS COMPLIANCE WITH THE WORK PRACTICE STANDARDS FOR BYPASS LINES - 40 CFR Part 63, Subpart UUU

i. [63.1569(c)(1)]
The permittee must demonstrate continuous compliance with each work practice standard in Table 36 [see section A.VI] that applies to this emissions unit according to the requirements in Table 39 [see section A.VI].

ii. [63.1569(c)(2)]
The permittee must demonstrate continuous compliance with the work practice standard in 63.1569(a)(2) [see section A.I.2] by complying with the procedures in the operation, maintenance, and monitoring plan.

d. [63.1571] PERFORMANCE TEST AND OTHER INITIAL COMPLIANCE DEMONSTRATION - 40 CFR Part 63, Subpart UUU

i. [63.1571(a)]
The permittee must conduct performance tests and report the results by no later than 150 days after April 11, 2005 and according to the provisions in 40 CFR 63.6(a)(2) of Subpart A.

(a) [63.1571(a)(1)]
For each emission limitation or work practice standard where initial compliance is not demonstrated using a performance test, opacity observation, or visible emission observation, the permittee must conduct the initial compliance demonstration within 30 calendar days after April 11, 2005.

(b) [63.1571(a)(2)]
For each emission limitation where the averaging period is 30 days, the 30-day period for demonstrating initial compliance begins at 12:00 a.m. on April 11, 2005 and ends at 11:59 p.m., May 11, 2005.

ii. [63.1571(b)] GENERAL REQUIREMENTS FOR PERFORMANCE TESTS AND PERFORMANCE EVALUATIONS
The permittee must:

(a) [63.1571(b)(1)]
Conduct each performance test according to the requirements in 40 CFR 63.7(e)(1).

(b) [63.1571(b)(2)]
Except for opacity and visible emission observations, conduct three separate test runs for each performance test as specified in 40 CFR 63.7(e)(3). Each test run must last at least 1 hour.

(c) [63.1571(b)(3)]
Conduct each performance evaluation according to the requirements in 40 CFR 63.8(e).

(d) [63.1571(b)(4)]
Not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in 40 CFR 63.7(e)(1).

iii. [63.1571(c)] ENGINEERING ASSESSMENT
The permittee may choose to use an engineering assessment to calculate the process vent flow rate, net heating value, TOC emission rate, and total organic HAP emission rate expected to yield the highest daily emission rate when determining the emission reduction or outlet concentration for the organic HAP standard for catalytic reforming units. If an engineering assessment is used, the permittee must document all data, assumptions, and procedures to the satisfaction of the Toledo Division of Environmental Services. An engineering assessment may include the approaches listed in 40 CFR 63.1571(c)(1) through (c)(4) [See Section A.V]. Other engineering assessments may be used but are subject to review and approval by the Toledo Division of Environmental Services.

(a) [63.1571(c)(1)]
The permittee may use previous test results provided the tests are representative of current operating practices at the emissions unit, and provided EPA methods or approved alternatives were used;

(b) [63.1571(c)(2)]
The permittee may use bench-scale or pilot-scale test data representative of the process under representative operating conditions;

(c) [63.1571(c)(3)]
The permittee may use maximum flow rate, TOC emission rate, organic HAP emission rate, or organic HAP or TOC concentration specified or implied within a permit limit applicable to the process vent; or

(d) [63.1571(c)(4)]
The permittee may use design analysis based on engineering principles, measurable process parameters, or physical or chemical laws or properties. Examples of analytical methods include, but are not limited to:

(i) [63.1571(c)(4)(i)]
Use of material balances based on process stoichiometry to estimate maximum TOC concentrations;

(ii) [63.1571(c)(4)(ii)]
Calculation of hourly average maximum flow rate based on physical equipment design such as pump or blower capacities; and

(iii) [63.1571(c)(4)(iii)]
Calculation of TOC concentrations based on saturation conditions.

iv. [63.1571(d)] ADJUSTING THE PROCESS OR CONTROL DEVICE MEASURED VALUES WHEN ESTABLISHING AN OPERATING LIMIT
If the permittee does a performance test to demonstrate compliance, the permittee must base the process or control device operating limits for continuous parameter monitoring systems on the results measured during the performance test.

(a) [63.1571(d)(4)]
If the permittee uses continuous parameter monitoring systems, the permittee may adjust one of the monitored operating parameters (flow rate, voltage and secondary current, pressure drop, liquid-to-gas ratio) from the average of measured values during the performance test to the maximum value (or minimum value, if applicable) representative of worst-case operating conditions, if necessary. This adjustment of measured values may be done using control device design specifications, manufacturer recommendations, or other applicable information. The permittee must provide supporting documentation and rationale in the Notification of Compliance Status, demonstrating to the satisfaction of the Toledo Division of Environmental Services, that the affected source complies with the applicable emission limit at the operating limit based on adjusted values.

v. [63.1571(e)]
The permittee may change the established operating limit by meeting the requirements in 63.1571(e)(1) through (2) [See Section A.V].

(a) [63.1571(e)(1)]
The permittee may change the established operating limit for a continuous parameter monitoring system by doing an additional performance test, a performance test in conjunction with an engineering assessment, or an engineering assessment to verify that, at the new operating limit, the permittee is in compliance with the applicable emission limitation.

(b) [63.1571(e)(2)]
The permittee must establish a revised operating limit for the continuous parameter monitoring system if changes are made in the process or operating conditions that could affect control system performance or designated conditions are changed after the last performance or

compliance tests were done. The permittee can establish the revised operating limit as described in 63.1571(e)(1) [See Section A.V].

## VI. Miscellaneous Requirements

1. Continuous $SO_2$ Monitoring - Certified Systems Statement of Certification
A statement of certification of the existing continuous $SO_2$ monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 6. Proof of certification shall be made available to the Toledo Division of Environmental Services upon request.

2. Excessive Audit Inaccuracy. If the RA, using the RATA, CGA, or RAA exceeds the criteria in section 5.2.3 of 40 CFR Part 60 Appendix F Procedure 1 the CEMS is out-of-control. If the CEMS is out-of-control, take necessary corrective action to eliminate the problem. Following corrective action, the source permittee must audit the CEMS with a RATA, CGA, or RAA to determine if the CEMS is operating within the specifications. A RATA must always be used following an out-of-control period resulting from a RATA. The audit following corrective action does not require analysis of USEPA performance audit samples. If audit results show the CEMS to be out-of-control, the CEMS operator shall report both the audit showing the CEMS to be out-of-control and the results of the audit following corrective action showing the CEMS to be operating within specifications.

3. [OAC rule 3745-31-05(D) as established by PTI 04-1046]
Nothing in this permit related to the PMMAP shall be construed to relieve the permittee from its obligation to comply with the requirements of OAC rule 3745-15-06(A) and (B), and OAC rule 3750-25-25 (related to toxic release reporting). Nothing in the permit related to the PMMAP shall modify or limit the Director's authority under OAC rule 3745-15-06(D) to require a preventive maintenance and malfunction abatement plan which is acceptable to the Director if, as the rule states, in the judgement of the Director, such a plan is needed for any emissions units at this facility.

4. Addresses of State air pollution control agencies and EPA Regional Offices.

   a. All requests, reports, applications, submittals, and other communications to the Administrator pursuant to this permit shall be submitted to: Director Ohio EPA c/o Bob Hodanbosi, Ohio EPA, Lazarus Government Center, P.O. Box 1049, Columbus, OH 43216-1049.

   b. All information required to be submitted to the Administrator in compliance with the requirements of this permit also shall be submitted to the Toledo Division of Environmental Services, 348 S. Erie St., Toledo, Ohio 43602, to which authority has been delegated under section 112(l) of the Clean Air Act as amended in 1990.

   c. If any State requires a submittal that contains all the information required in an application, notification, request, report, statement, or other communication required in

this part, the permittee may send the appropriate Regional Office of the EPA a copy of that submittal to satisfy the requirements of this part for that communication.

If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

5. [40 CFR Part 63, Subpart UUU]
The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward.

a. The following tables from 40 CFR Part 63, Subpart UUU are attached: Tables 29; 30; 31; 33; 34; 35; 36; 37; 38; 39; 40; 41; 42; 43 and 44.

**TABLE 29 TO Subpart UUU OF PART 63**.—HAP EMISSION LIMITS FOR SULFUR RECOVERY UNITS
[As stated in § 63.1568(a)(1), you must meet each emission limitation in the following table that applies to you]

| For * * * | You must meet this emission limit for each process vent * * * |
|---|---|
| 1. Each new or existing Claus sulfur recovery unit part of a sulfur recovery plant of 20 long tons per day or more and subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2). | a. 250 ppmv (dry basis) of $SO_2$ at zero percent excess air if you use an oxidation or reduction control system followed by incineration.<br><br>b. 300 ppmv of reduced sulfur compounds calculated as ppmv $SO_2$ (dry basis) at zero percent excess air if you use a reduction control system without incineration. |
| 2. Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2): Option 1 (Elect NSPS). | a. 250 ppmv (dry basis) of $SO_2$ at zero percent excess air if you use an oxidation or reduction control system followed by incineration.<br><br>b. 300 ppmv of reduced sulfur compounds calculated as ppmv $SO_2$ (dry basis) at zero percent excess air if you use a reduction control system without incineration. |
| 3. Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in paragraph (a)(2) of 40 CFR 60.104: Option 2 (TRS limit). | 300 ppmv of total reduced sulfur (TRS) compounds, expressed as an equivalent $SO_2$ concentration (dry basis) at zero percent oxygen. |

**TABLE 30 TO Subpart UUU OF PART 63**.—OPERATING LIMITS FOR HAP EMISSIONS FROM SULFUR RECOVERY UNITS
[As stated in § 63.1568(a)(2), you must meet each operating limit in the following table that applies to you]

| For * * * | If use this type of control device | You must meet this operating limit* * * |
|---|---|---|
| 1. Each new or existing Claus sulfur recovery unit part of a sulfur recovery plant of 20 long tons per day or more and subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2). | Not applicable ..... | Not applicable. |
| 2. Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2): Option 1 (Elect NSPS). | Not applicable ..... | Not applicable. |
| 3. Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2): Option 2 (TRS limit). | Thermal incinerator ..... | Maintain the daily average combustion zone temperature above the limit established during the performance test; and maintain the daily average oxygen concentration in the vent stream (percent, dry basis) above the |

| | | |
|---|---|---|
| | | limit established during the performance test. |

**TABLE 31 TO Subpart UUU OF PART 63.**—CONTINUOUS MONITORING SYSTEMS FOR HAP EMISSIONS FROM SULFUR RECOVERY UNITS

[As stated in § 63.1568(b)(1), you must meet each requirement in the following table that applies to you]

| For * * * | For this limit * * * | You must install and operate this continuous monitoring system * * * |
|---|---|---|
| 1. Each new or existing Claus sulfur recovery unit part to a sulfur recovery plant of 20 long tons per day and subject to the NSPS for sulfur oxides in 40 CFR 60.104 (1) (2). | a. 250 ppmv (dry basis) of $SO_2$ at zero percent excess air if you use an oxidation or reduction control system followed by incineration. | Continuous emission monitoring system to measure and record the hourly average concentration of $SO_2$ (dry basis) at zero percent excess air for each exhaust stack. This system must include an oxygen monitor for correcting the data for excess air. |
| | b. 300 ppmv of reduced sulfur compounds calculated as ppmv $SO_2$ (dry basis) at zero percent excess air if you use a reduction control system without incineration. | Continuous emission monitoring system to measure and record the hourly average concentration of reduced sulfur and oxygen ($O_2$) emissions. Calculate the reduced sulfur emissions as $SO_2$ (dry basis) at zero percent excess air. *Exception:* You can use an instrument having an air or $SO_2$ dilution and oxidation system to convert the reduced sulfur to $SO_2$ for continuously monitoring and recording the concentration (dry basis) at zero percent excess air of the resultant $SO_2$ instead of the reduced sulfur monitor. The monitor must include an oxygen monitor for correcting the data for excess oxygen. |
| 2. Option 1: Elect NSPS. Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in paragraph (a) (2) of 40 CFR 60.104. | a. 250 ppmv (dry basis) of $SO_2$ at zero percent excess air if you use an oxidation or reduction control system followed by incineration. | Continuous emission monitoring system to measure and record the hourly average concentration of $SO_2$ (dry basis), at zero percent excess air for each exhaust stack. This system must include an oxygen monitor for correcting the data for excess air. |
| | b. 300 ppmv of reduced sulfur compounds calculated as ppmv $SO_2$ (dry basis) at zero percent excess air if you use a reduction control system without incineration. | Continuous emission monitoring system to measure and record the hourly average concentration of reduced sulfur and $O_2$ emissions for each exhaust stack. Calculate the reduced sulfur emissions as $SO_2$ (dry basis), at zero percent excess air. *Exception:* You can use an instrument having an air or $O_2$ dilution and oxidation system to convert the reduced sulfur to $SO_2$ for continuously monitoring and recording the concentration (dry basis) at zero percent excess air of the resultant $SO_2$ instead of the reduced sulfur monitor. The monitor must include an oxygen monitor for correcting the data for excess oxygen. |
| 3. Option 2: TRS limit Each new or existing sulfur recovery unit (Claus or Other type, regardless or size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104 (a) (2). | 300 ppmv of total reduced sulfur (TRS) compounds, expressed as an equivalent $SO_2$ concentration (dry basis) at zero percent oxygen. | Continuous emission monitoring system to measure and record the hourly average concentration of TRS for each exhaust stack. This monitor must include an oxygen monitor for correcting the data for excess oxygen; or continuous parameter monitoring systems to measure and record the combustion zone temperature of each thermal |

| | | |
|---|---|---|
| | | incinerator and the oxygen content (percent, dry basis) in the vent stream of the incinerator. |

**TABLE 33 TO Subpart UUU OF PART 63.**—INITIAL COMPLIANCE WITH HAP EMISSION LIMITS FOR SULFUR RECOVERY UNITS
[As stated in § 63.1568(b)(5), you must meet each requirement in the following table that applies to you]

| For * * * | For the following emission limit * * * | You have demonstrated initial compliance if * * * |
|---|---|---|
| 1. Each new or existing Clause sulfur recovery unit part of a sulfur recovery plant of 20 long tons per day and subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2). | a. 250 ppmv (dry basis) SO2 at zero percent excess air if you use an oxidation or reduction control system followed by incineration. | You have already conducted a performance test to demonstrate initial compliance with the NSPS and the hourly average SO2 emissions measured by the continuous emission monitoring system are less than or equal to 250 ppmv (dry basis) at zero percent excess air. As part of the Notification of Compliance Status, you must certify that your vent meets the SO2 limit. You are not required to do another performance test to demonstrate initial compliance. You have already conducted a performance evaluation to demonstrate initial compliance with the applicable performance specification. As part of your Notification of Compliance Status, you must certify that your continuous emission monitoring system meets the applicable requirements in § 63.1572. You are not required to do another performance evaluation to demonstrate initial compliance. |
| | b. 300 ppmv of reduced sulfur compounds calculated as ppmv SO2 (dry basis) at zero percent excess air if you use a reduction control system without incineration. | You have already conducted a performance test to demonstrate initial compliance with the NSPS and the hourly average SO2 emissions measured by your continuous emission monitoring system are less than or equal to 250 ppmv (dry basis) at zero percent excess air. As part of the Notification of Compliance Status, you must certify that your vent meets the SO2 limit. You are not required to do another performance test do demonstrate initial compliance.<br><br>You have already conducted a performance evaluation to demonstrate initial compliance with the applicable performance specification. As part of your Notification of Compliance Status, you must certify that your continuous emission monitoring system meets the applicable requirements in § 63.1572. You are not required to do another performance evaluation to demonstrate initial compliance. |
| 2. Option 1: Elect NSPS. Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2). | a. 250 ppmv (dry basis) of SO2 at zero percent excess air if you use an oxidation control system followed by incineration. | The hourly average SO2 emissions measured by the continuous emission monitoring system over the 24-hour period of the initial performance test are not more than 250 ppvm (dry basis) at zero percent excess air; and your performance evaluation shows the monitoring system meets the applicable requirements in § 63.1572.<br><br>The hourly average reduced sulfur emissions measured by the continuous emission monitoring |

| | | |
|---|---|---|
| | b. 300 ppmv of reduced sulfur compounds calculated as ppmv SO2 (dry basis) at zero percent excess air if you use a reduction control system without incineration. | system over the 24-hour period of the performance test no more than 300 ppmv, calculated as ppmv SO2 (dry basis) at zero percent excess air; and your performance evaluation shows the continuous emission monitoring system meets the applicable requirements in § 63.1572. |
| 3. Option 2: TRS limit. Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2). | 300 ppmv of TRS compounds expressed as an equivalent $SO_2$ concentration (dry basis) at zero percent oxygen. | If you do not use a continuous emission monitoring system, the average TRS emissions measured using Method 15 over the period of the initial performance test are less than or equal to 300 ppmv expressed as equivalent SO2 concentration (dry basis) at zero percent oxygen. If you use a continuous emission monitoring system the hourly average TRS emissions measured by the continuous emission monitoring system over the 24-hour period of the performance test are no more than 300 ppmv expressed as an equivalent $SO_2$ concentration (dry basis) at zero percent oxygen; and your performance evaluation shows the continuous emission monitoring system meets the applicable requirements in § 63.1572. |

**TABLE 34 TO Subpart UUU OF PART 63.**—CONTINUOUS COMPLIANCE WITH HAP EMISSION LIMITS FOR SULFUR RECOVERY UNITS

[As stated in § 63.1568(c)(1), you must meet each requirement in the following table that applies to you.]

| For * * * | For this emission limit * * * | You must demonstrate continuous compliance by * * * |
|---|---|---|
| 1. Each new or existing Claus sulfur recovery unit part of a sulfur recovery plant of 20 long tons per or more and subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2). | a. 250 ppmv (dry basis) SO2 at zero percent excess air if you use an oxidation or reduction control system followed by incineration. | Collecting the hourly average SO2 monitoring data (dry basis, percent excess air) according to § 63.1572; maintaining the hourly average SO2 concentration at or below the applicable limit; determining and recording each 12-hour average SO2 day concentration; and reporting any 12-hour average SO2 concentration greater than the applicable emission limitation in the compliance report required in § 63.1575. |
| | b. 300 ppmv of reduced sulfur compounds calculated as ppmv (dry basis) SO2 at zero percent excess air if you use a reduction control system without incineration. | Collecting the hourly average reduced sulfur and O2 data according to § 63.1572; and maintaining the hourly average concentration of reduced sulfur at or below the applicable limit; and determining and recording each 12-hour average concentration of reduced sulfur; and reporting any 12-hour average concentration of reduced sulfur greater than the applicable emission limitation in the compliance report required in § 63.1575. |
| 2. Option 1: Elect NSPS Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2). | a. 250 ppmv (dry basis) of SO2 at zero percent excess air (for oxidation or reduction system followed by incineration). | Collecting the hourly average SO2 monitoring data (dry basis, percent excess air) according to § 63.1572; maintaining the hourly average SO2 concentration at or below the applicable limit; determining and recording each 12-hour average SO2 concentration; and reporting any 12-hour average SO2 concentration greater than the applicable emission limitation in the compliance report required in § 63.1575. |
| | b. 300 ppmv of reduced sulfur compounds | Collecting the hourly average reduced sulfur |

| | | |
|---|---|---|
| | calculated as ppmv SO2 (dry basis) at zero percent excess air (for reduction control system without incineration). | (and air or O2 dilution and oxidation data) according to § 63.1572; maintaining the hourly average SO2 concentration at or below the applicable limit; reducing the monitoring data to 12-hour averages; and reporting any 12-hour average SO2 concentration greater than the applicable limit in the compliance report required by § 63.1575. |
| 3. Option 2: TRS limit Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2). | 300 ppmv of TRS compounds, expressed as an SO2 concentration (dry basis) at zero percent oxygen or reduced sulfur compounds calculated as ppmv SO2 (dry basis) at zero percent excess air. | Collecting the hourly average TRS monitoring data according to § 63.1572, if you use a continuous emission monitoring system; maintaining the hourly average concentration of TRS at or below the applicable limit; reducing the TRS monitoring data to 12-hour averages; reporting any 12-hour average TRS greater than the applicable limit in the compliance report required by § 63.1575; and maintaining the hourly average concentration of TRS below the applicable limit if you use continuous parameter monitoring systems. |

**TABLE 35 TO Subpart UUU OF PART 63.**—CONTINUOUS COMPLIANCE WITH OPERATING LIMITS FOR HAP EMISSIONS FROM SULFUR RECOVERY UNITS

[As stated in § 63.1568(c)(1), you must meet each requirement in the following table that applies to you]

| For * * * | For this operating limit * * * | You must demonstrate continuous compliance by * * * |
|---|---|---|
| 1. Each new or existing Claus sulfur recovery unit part of a sulfur recovery plant of 20 long tons per day or more and subject to the NSPS for sulfur oxides in paragraph 40 CFR 60.104(a)(2). | Not applicable ..... | Meeting the requirements of Table 34 of this subpart. |
| 2. Option 1: Elect NSPS Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2). | Not applicable ..... | Meeting the requirements of Table 34 of this subpart. |
| 3. Option 2: TRS limit Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2) | a. Maintain the daily average combustion zone temperature above the level established during the performance test. | Collecting the hourly and daily average temperature monitoring data according to § 63.1572; and maintaining the daily average combustion zone temperature at or above the limit established during the performance test. |
| | b. The daily average oxygen concentration in the vent stream (percent, dry basis) must not fall below the level established during the performance test. | Collecting the hourly and daily average $O_2$ monitoring data according to § 63.1572; and maintaining the average $O_2$ concentration above the level established during the performance test. |

**TABLE 36 TO Subpart UUU OF PART 63.**—WORK PRACTICE STANDARDS FOR HAP EMISSIONS FROM BYPASS LINES

[As stated in § 63.1569(a)(1), you must meet each work practice standard in the following table that applies to you]

| Option | You must meet one of these equipment standards * * * |
|---|---|

| | |
|---|---|
| 1. Option 1 ..... | Install and operate a device (including a flow indicator, level recorder, or electronic valve position monitor) to continuously detect, at least every hour, whether flow is present in the bypass line. Install the device at or as near as practical to the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere. |
| 2. Option 2 ..... | Install a car-seal or lock-and-key device placed on the mechanism by which the bypass device flow position is controlled (e.g., valve handle, damper level) when the bypass device is in the closed position such that the bypass line valve cannot be opened without breaking the seal or removing the device. |
| 3. Option 3 ..... | Seal the bypass line by installing a solid blind between piping flanges. |
| 4. Option 4 ..... | Vent the bypass line to a control device that meets the appropriate requirements in this subpart. |

**TABLE 37 TO Subpart UUU OF PART 63.**—REQUIREMENTS FOR PERFORMANCE TESTS FOR BYPASS LINES

[As stated in § 63.1569(b)(1), you must meet each requirement in the following table that applies to you]

| For this standard . . . | You must . . . |
|---|---|
| 1. Option 1: Install and operate a flow indicator, level recorder, or electronic valve position monitor. | Record during the performance test for each type of control device whether the flow indicator, level recorder, or electronic valve position monitor was operating and whether flow was detected at any time during each hour of level the three runs comprising the performance test. |

**TABLE 38 TO Subpart UUU OF PART 63.**—INITIAL COMPLIANCE WITH WORK PRACTICE STANDARDS FOR HAP EMISSIONS FROM BYPASS LINES

[As stated in § 63.1569(b)(2), you must meet each requirement in the following table that applies to you]

| For * * * | For this work practice standard * * * | You have demonstrated initial compliance if * * * |
|---|---|---|
| 1. Each new or existing bypass line associated with a catalytic cracking unit, catalytic reforming unit, or sulfur recovery unit. | a. Option 1: Install and operate a device (including a flow indicator, level recorder, or electronic valve position monitor) to continuously detect, at least every hour, whether flow is present in the bypass line. Install the device at or as near as practical to the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere. | The installed equipment operates properly during each run of the performance test and no flow is present in the line during the test. |
| | b. Option 2: Install a car-seal or lock-and-key device placed on the mechanism by which the bypass device flow position is controlled (e.g., valve handle, damper level) when the bypass device is in the closed position such that the bypass line valve cannot be opened without breaking the seal or removing the device. | As part of the notification of compliance status, you certify that you installed the equipment, the equipment was operational by your compliance date, and you identify what equipment was installed. |
| | c. Option 3: Seal the bypass line by installing a solid blind between piping flanges. | See item 1.b. of this table. |
| | d. Option 4: Vent the bypass line to a control device that meets the appropriate requirements in this subpart. | See item 1.b. of this table. |

**TABLE 39 TO Subpart UUU OF PART 63.**—CONTINUOUS COMPLIANCE WITH WORK PRACTICE STANDARDS FOR HAP EMISSIONS FROM BYPASS LINES

[As stated in § 63.1569(c)(1), you must meet each requirement in the following table that applies to you]

| If you elect this standard * * * | You must demonstrate continuous compliance by * * * |
|---|---|
| 1. Option 1: Flow indicator, level recorder, or electronic valve position monitor. | Continuously monitoring and recording whether flow is present in the bypass line; visually inspecting the device at least once every hour if the device is not equipped with a recording system that provides a continuous record; and recording whether the device is operating properly and whether flow is present in the bypass line. |
| 2. Option 2: Car-seal or lock-and-key device ..... | Visually inspecting the seal or closure mechanism at least once every month; and recording whether the bypass line valve is maintained in the closed position and whether flow is present in the line. |
| 3. Option 3: Solid blind flange ..... | Visually inspecting the blind at least once a month; and recording whether the blind is maintained in the correct position such that the vent stream cannot be diverted through the bypass line. |
| 4. Option 4: Vent to control device ..... | Monitoring the control device according to appropriate subpart requirements. |
| 5. Option 1, 2, 3, or 4 ..... | Recording and reporting the time and duration of any bypass. |

**TABLE 40 TO Subpart UUU OF PART 63.**—REQUIREMENTS FOR INSTALLATION, OPERATION, AND MAINTENANCE OF CONTINUOUS OPACITY MONITORING SYSTEMS AND CONTINUOUS EMISSION MONITORING SYSTEMS

[As stated in § 63.1572(a)(1) and (b)(1), you must meet each requirement in the following table that applies to you]

| This type of continuous opacity or emission monitoring system * * * | Must meet these requirements * * * |
|---|---|
| 1. Continuous opacity monitoring system ..... | Performance specification 1 (40 CFR Part 60, Appendix B). |
| 2. CO continuous emission monitoring system ..... | Performance specification 4 (40 CFR Part 60, Appendix B); span value of 1,000 ppm; and procedure 1 (40 CFR Part 60, Appendix F) except relative accuracy test audits are required annually instead of quarterly. |
| 3. CO continuous emission monitoring system used to demonstrate emissions average under 50 ppm (dry basis). | Performance specification 4 (40 CFR Part 60, Appendix B); and span value of 100 ppm. |
| 4. $SO_2$ continuous emission monitoring for sulfur recovery unit with oxidation control system or reduction control system; this monitor must include an $O_2$ monitor for correcting the data for excess air. | Performance specification 2 (40 CFR Part 60, Appendix B); span values of 500 ppm $SO_2$ and 10 percent $O_2$; use Methods 6 or 6C and 3A or 3B (40 CFR Part 60, Appendix A) for certifying $O_2$ monitor; and procedure 1 (40 CFR Part 60, Appendix F) except relative accuracy test audits are required annually instead of quarterly. |
| 5. Reduced sulfur and $O_2$ continuous emission monitoring system for sulfur recovery unit with reduction control system not followed by incineration; this monitor must include an $O_2$ monitor for correcting the data for excess air unless exempted. | Performance specification 5 (40 CFR Part 60, Appendix B), except calibration drift specification is 2.5 percent of the span value instead of 5 percent; 450 ppm reduced sulfur and 10 percent $O_2$; use Methods 15 or 15A and 3A or 3B (40 CFR Part 60, Appendix A) for certifying $O_2$ monitor; if Method 3A or 3B yields $O_2$ concentrations below 0.25 percent during the performance evaluation, the $O_2$ concentration can be assumed to be zero and the $O_2$ monitor is not required; and procedure 1 (40 CFR Part 60, Appendix F), except relative accuracy test audits, are required annually instead of quarterly. |
| 6. Instrument with an air or O2 dilution and oxidation system to convert reduced sulfur to $SO_2$ for continuously monitoring the concentration of $SO_2$ instead of reduced sulfur monitor and $O_2$ monitor. | Performance specification 5 (40 CFR Part 60, Appendix B); span value of 375 ppm $SO_2$ and 10 percent $O_2$; use Methods 15 or 15A and 3A or 3B for certifying $O_2$ monitor; and procedure 1 (40 CFR Part 60, Appendix F), except relative accuracy test audits, are required annually instead of quarterly. |
| 7. TRS continuous emission monitoring system for sulfur recovery unit; this monitor must include an $O_2$ monitor for correcting the data for excess air. | Performance specification 5 (40 CFR Part 60, Appendix B). |
| 8. $O_2$ monitor for oxygen concentration ..... | If necessary due to interferences, locate the oxygen sensor prior to the introduction of any outside gas stream; performance specification 3 (40 CFR Part 60, Appendix B; span value for $O_2$ sensor is 10 percent; and procedure 1 (40 CFR Part 60, Appendix F), except relative accuracy test audits, are required annually instead of quarterly. |

**TABLE 41 TO Subpart UUU OF PART 63.**—REQUIREMENTS FOR INSTALLATION, OPERATION, AND MAINTENANCE OF CONTINUOUS PARAMETER MONITORING SYSTEMS—Continued

[As stated in § 63.1572(c)(1), you must meet each requirement in the following table that applies to you]

| If you use a continuous parameter monitoring system to measure and record * * * | You must * * * |
|---|---|
| 1. Voltage and secondary current or total power input. | At least monthly, inspect all components of the continuous parameter monitoring system for integrity and all electrical connections for continuity; and record the results of each inspection. |
| 2. Pressure drop [1] ..... | Locate the pressure sensor(s) in a position that provides a representative measurement of the pressure; minimize or eliminate pulsating pressure, vibration, and internal and external corrosion; use a gauge with an accuracy ± 2 percent over the operating range; check pressure tap for plugs at least once a week; using a manometer, check gauge calibration quarterly and transducer calibration monthly; for a semi-regenerative catalytic reforming unit, you can check the calibration quarterly and monthly or prior to regeneration, whichever is longer; record the results of each calibration; conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range, or install a new pressure sensor; at least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage; and record the results of each inspection. |
| 3. Air flow rate, gas flow rate, or total water (or scrubbing liquid) flow rate. | Locate the flow sensor(s) and other necessary equipment such as straightening vanes in a position that provides representative flow; use a flow rate sensor with an accuracy within ±5 percent; reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances; conduct a flow sensor calibration check at least semiannually; for a semi-regenerative catalytic reforming unit, you can check the calibration at least semiannually or prior to regeneration, whichever is longer; record the results of each calibration; if you elect to comply with Option 3 (Ni lb/hr) or Option 4 (Ni lb/1,000 lbs of coke burn-off) for the HAP metal emission limitations in § 63.1564, install the continuous parameter monitoring system for gas flow rate as close as practical to the continuous opacity monitoring system; and if you don't use a continuous opacity monitoring system, install the continuous parameter monitoring system for gas flow rate as close as practical to the control device. |
| 4. Combustion zone temperature ..... | Install the temperature sensor in the combustion zone or in the ductwork immediately downstream of the combustion zone before any substantial heat exchange occurs; locate the temperature sensor in a position that provides a representative temperature; use a temperature sensor with an accuracy of ±1 percent of the temperature being measured, expressed in degrees Celsius (C) or ±0.5 degrees C, whichever is greater; shield the temperature sensor system from electromagnetic interference and chemical contaminants; if you use a chart recorder, it must have a sensitivity in the minor division of at least 20 degrees Fahrenheit; perform an electronic calibration at least semiannually according to the procedures in the manufacturer's owners manual; following the electronic calibration, conduct a temperature sensor validation check, in which a second or redundant temperature sensor placed nearby the process temperature sensor must yield a reading within 16.7 degrees C of the process temperature sensor's reading; record the results of each calibration and validation check; conduct calibration and validation checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range, or install a new temperature sensor; and at least monthly, inspect all components for integrity and all electrical connections for continuity, oxidation, and galvanic corrosion. |
| 5. pH ..... | Locate the pH sensor in a position that provides a representative measurement of pH; ensure the sample is properly mixed and representative of the fluid to be measured; check the pH meter's calibration on at least two points every 8 hours of process operation; at least monthly, inspect all components for integrity and all electrical components for continuity; record the results of each inspection; and if you use pH strips to measure the pH of the water exiting a wet scrubber as an alternative to a continuous parameter monitoring system, you must use pH strips with an accuracy of ±10 percent. |
| 6. HCl concentration ..... | Use a colorimetric tube sampling system with a printed numerical scale in ppmv, a standard measurement range of 1 to 10 ppmv (or 1 to 30 ppmv if applicable), and a standard deviation for measured values of no more than ±15 percent. System must include a gas detection pump and hot air probe if needed for the measurement range. |

**TABLE 42 TO Subpart UUU OF PART 63.—ADDITIONAL** INFORMATION FOR INITIAL NOTIFICATION OF COMPLIANCE STATUS

[As stated in § 63.1574(d), you must meet each requirement in the following table that applies to you]

| For * * * | You must provide this additional information * * * |
|---|---|
| 1. Identification of affected sources and emission points. | Nature, size, design, method of operation, operating design capacity of each affected source; identify each emission point for each HAP; identify any affected source or vent associated with an affected source not subject to the requirements of Subpart UUU. |
| 2. Initial compliance ..... | Identification of each emission limitation you will meet for each affected source, including any option you select (i.e., NSPS, PM or Ni, flare, percent reduction, concentration, options for bypass lines); if applicable, certification that you have already conducted a performance test to demonstrate initial compliance with the NSPS for an affected source; certification that the vents meet the applicable emission limit and the continuous opacity or that the emission monitoring system meets the applicable performance specification; if applicable, certification that you have installed and verified the operational status of equipment by your compliance date for each bypass line that meets the requirements of Option 2, 3, or 4 in § 63.1569 and what equipment you installed; identification of the operating limit for each affected source, including supporting documentation; if your affected source is subject to the NSPS, certification of compliance with NSPS emission limitations and performance specifications; a brief description of performance test conditions (capacity, feed quality, catalyst, etc.); an engineering assessment (if applicable); and if applicable, the flare design (e.g., steam-assisted, air-assisted, or non-assisted), all visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the Method 22 test. |
| 3. Continuous compliance ..... | Each monitoring option you elect; and identification of any unit or vent for which monitoring is not required; and the definition of ''operating day.'' (This definition, subject to approval by the applicable permitting authority, must specify the times at which a 24-hr operating day begins and ends.) |

**TABLE 43 TO Subpart UUU OF PART 63.**—REQUIREMENTS FOR REPORTS

[As stated in § 63.1575(a), you must meet each requirement in the following table that applies to you]

| You must submit a(n) * * * | The report must contain * * * | You must submit the report * * * |
|---|---|---|
| 1. Compliance report ..... | If there are not deviations from any emission limitation or work practice standard that applies to you, a statement that there were no deviations from the standards during the reporting period and that no continuous opacity monitoring system or continuous emission monitoring system was inoperative, inactive, out-of-control, repaired, or adjusted; and if you have a deviation from any emission limitation or work practice standard during the reporting period, the report must contain the information in § 63.1575(d) or (e) | Semiannually according to the requirements in § 63.1575(b). |

Emissions Unit ID: **P037**

**Table 44 to Subpart UUU of Part 63 -** Applicability of NESHAP General Provisions to Subpart UUU
As stated in §63.1577, you must meet each requirement in the following table that applies to you.

| Citation | Subject | Applies to Subpart UUU | Explanation |
|---|---|---|---|
| §63.1 | Applicability | Yes | Except that Subpart UUU specifies calendar or operating day. |
| §63.2 | Definitions | Yes | |
| §63.3 | Units and Abbreviations | Yes | |
| §63.4 | Prohibited Activities | Yes | |
| §63.5(a)-(c) | Construction and Reconstruction | Yes | In §63.5(b)(4), replace the reference to §63.9 with §63.9(b)(4) and (5). |
| §63.5(d)(1)(i) | Application for Approval of Construction or Reconstruction - General Application Requirements | Yes | Except, Subpart UUU specifies the application is submitted as soon as practicable before startup but no later than 90 days (rather than 60) after the promulgation date where construction or reconstruction had commenced and initial startup had not occurred before promulgation. |
| §63.5(d)(1)(ii) | | Yes | Except that emission estimates specified in §63.5(d)(1)(ii)(H) are not required. |
| §63.5(d)(1)(iii) | | No | Subpart UUU specifies submission of notification of compliance status. |
| §63.5(d)(2) | | No | |
| §63.5(d)(3) | | Yes | Except that §63.5(d)(3)(ii) does not apply. |
| §63.5(d)(4) | | Yes | |
| §63.5(e) | Approval of Construction or Reconstruction | Yes | |
| §63.5(f)(1) | Approval of Construction or Reconstruction Based on State Review | Yes | |
| §63.5(f)(2) | | Yes | Except that 60 days is changed to 90 days and cross-reference to §63.9(b)(2) does not apply. |
| §63.6(a) | Compliance with Standards and Maintenance - Applicability | Yes | |
| §63.6(b)(1)-(4) | Compliance Dates for New and Reconstructed Sources | Yes | |
| §63.6(b)(5) | | Yes | Except that Subpart UUU specifies different compliance dates for sources. |
| §63.6(b)(6) | [Reserved] | Not applicable | |

| | | | |
|---|---|---|---|
| §63.6(b)(7) | Compliance Dates for New and Reconstructed Area Sources That Become Major | Yes | |
| §63.6(c)(1)-(2) | Compliance Dates for Existing Sources | Yes | Except that Subpart UUU specifies different compliance dates for sources subject to Tier II gasoline sulfur control requirements. |
| §63.6(c)(3)-(4) | [Reserved] | Not applicable | |
| §63.6(c)(5) | Compliance Dates for Existing Area Sources That Become Major | Yes | |
| §63.6(d) | [Reserved] | Not applicable | |
| §63.6(e)(1)-(2) | Operation and Maintenance Requirements | Yes | |
| §63.6(e)(3)(i)-(iii) | Startup, Shutdown, and Malfunction Plan | Yes | |
| §63.6(e)(3)(iv) | | Yes | Except that reports of actions not consistent with plan are not required within 2 and 7 days of action but rather must be included in next periodic report. |
| §63.6(e)(3)(v)-(viii) | | Yes | The owner or operator is only required to keep the latest version of the plan. |
| §63.6(f)(1)-(2)(iii)(C) | Compliance with Emission Standards | Yes | |
| §63.6(f)(2)(iii)(D) | | No | |
| §63.6(f)(2)(iv)-(v) | | Yes | |
| §63.6(f)(3) | | Yes | |
| §63.6(g) | Alternative Standard | Yes | |
| §63.6(h) | Opacity/VE Standards | Yes | |
| §63.6(h)(2)(i) | Determining Compliance with Opacity/VE Standards | No | Subpart UUU specifies methods. |
| §63.6(h)(2)(ii) | [Reserved] | Not applicable | |
| §63.6(h)(2)(iii) | | Yes | |
| §63.6(h)(3) | [Reserved] | Not applicable | |
| §63.6(h)(4) | Notification of Opacity/VE Observation Date | Yes | Applies to Method 22 tests. |
| §63.6(h)(5) | Conducting Opacity/VE Observations | No | |
| §63.6(h)(6) | Records of Conditions During Opacity/VE Observations | Yes | Applies to Method 22 observations. |
| §63.6(h)(7)(i) | Report COM Monitoring Data from Performance Test | Yes | |
| §63.6(h)(7)(ii) | Using COM Instead of Method 9 | No | |

| | | | |
|---|---|---|---|
| §63.6(h)(7)(iii) | Averaging Time for COM during Performance Test | Yes | |
| §63.6(h)(7)(iv) | COM Requirements | Yes | |
| §63.6(h)(8) | Determining Compliance with Opacity/VE Standards | Yes | |
| §63.6(h)(9) | Adjusted Opacity Standard | Yes | |
| §63.6(i)(1)-(14) | Extension of Compliance | Yes | Not applicable to an affected source with Tier II compliance date. May be applicable to an affected source exempt from Tier II rule. |
| §63.6(i)(15) | [Reserved] | Not applicable | |
| §63.6(i)(16) | | Yes | |
| §63.6(j) | Presidential Compliance Exemption | Yes | |
| §63.7(a)(1) | Performance Test Requirements-Applicability | Yes | Except that Subpart UUU specifies the applicable test and demonstration procedures. |
| §63.7(a)(2) | Performance Test Dates | No | Test results must be submitted in the Notification of Compliance Status report due 150 days after the compliance date. |
| §63.7(a)(3) | Section 114 Authority | Yes | |
| §63.7(b) | Notifications | Yes | Except that Subpart UUU specifies notification at least 30 days prior to the scheduled test date rather than 60 days. |
| §63.7(c) | Quality Assurance Program/Site-Specific Test Plan | Yes | |
| §63.7(d) | Performance Test Facilities | Yes | |
| §63.7(e) | Conduct of Tests | Yes | |
| §63.7(f) | Alternative Test Method | Yes | |
| §63.7(g) | Data Analysis, Record Keeping, Reporting | Yes | Except performance test reports must be submitted with notification of compliance status due 150 days after the compliance date. |
| §63.7(h) | Waiver of Tests | Yes | |
| §63.8(a)(1) | Monitoring Requirements - Applicability | Yes | |
| §63.8(a)(2) | Performance Specifications | Yes | |
| §63.8(a)(3) | [Reserved] | Not appli-cable | |
| §63.8(a)(4) | Monitoring with Flares | Yes | |
| §63.8(b)(1) | Conduct of Monitoring | Yes | |
| §63.8(b)(2)-(3) | Multiple Effluents and Multiple Monitoring Systems | Yes | Subpart UUU specifies the required monitoring locations. |
| §63.8(c)(1) | Monitoring System Operation and Maintenance | Yes | |

| | | | |
|---|---|---|---|
| §63.8(c)(1)(i)-(ii) | Startup, Shutdown, and Malfunctions | Yes | Except that Subpart UUU specifies that reports are not required if actions are consistent with the SSM plan, unless requested by the permitting authority. If actions are not consistent, actions must be described in next compliance report. |
| §63.8(c)(1)(iii) | Compliance with Operation and Maintenance Requirements | Yes | |
| §63.8(c)(2)-(3) | Monitoring System Installation | Yes | Except that Subpart UUU specifies that for continuous parameter monitoring systems, operational status verification includes completion of manufacturer written specifications or installation operation, and calibration of the system or other written procedures that provide adequate assurance that the equipment will monitor accurately. |
| §63.8(c)(4) | Continuous Monitoring System Requirements | No | Subpart UUU specifies operational requirements. |
| §63.8(c)(4)(i)-(ii) | Continuous Monitoring System Requirements | Yes | Except that these requirements apply only to a continuous opacity monitoring system or a continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or $SO_2$ limits. |
| §63.8(c)(5) | COM Minimum Procedures | Yes | |
| §63.8(c)(6) | CMS Requirements | No | Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or $SO_2$ limits. |
| §63.8(c)(7)-(8) | CMS Requirements | Yes | |
| §63.8(d) | Quality Control Program | Yes | Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or $SO_2$ limits. |
| §63.8(e) | CMS Performance Evaluation | Yes | Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or $SO_2$ limits. Results are to be submitted as part of the Notification of Compliance Status due 150 days after the compliance date. |
| §63.8(f)(1)-(5) | Alternative Monitoring Method | Yes | Except that Subpart UUU specifies procedures for requesting alternative monitoring systems and alternative parameters. |

| | | | |
|---|---|---|---|
| §63.8(f)(6) | Alternative to Relative Accuracy Test | Yes | Applicable to continuous emission monitoring systems if performance specification requires a relative accuracy test audit. |
| §63.8(g)(1)-(4) | Reduction of Monitoring Data | Yes | Applies to a continuous opacity monitoring system or continuous emission monitoring system. |
| §63.8(g)(5) | Data Reduction | No | Subpart UUU specifies requirements. |
| §63.9(a) | Notification Requirements - Applicability | Yes | Duplicate Notification of Compliance Status report to the Regional Administrator may be required. |
| §63.9(b)(1)-(5) | Initial Notifications | Yes | Except that notification of construction or reconstruction is to be submitted as soon as practicable before startup but no later than 30 days (rather than 60 days) after the effective date if construction or reconstruction had commenced but startup had not occurred before the effective date. |
| §63.9(c) | Request for Extension of Compliance | Yes | |
| §63.9(d) | New Source Notification for Special Compliance Requirements | Yes | |
| §63.9(e) | Notification of Performance Test | Yes | Except that notification is required at least 30 days before test. |
| §63.9(f) | Notification of VE/Opacity Test | Yes | |
| §63.9(g) | Additional Notification Requirements for Sources with Continuous Monitoring Systems | Yes | Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or $SO_2$ limits. |
| §63.9(h) | Notification of Compliance Status | Yes | Except that Subpart UUU specifies the notification is due no later than 150 days after compliance date. |
| §63.9(i) | Adjustment of Deadlines | Yes | |
| §63.9(j) | Change in Previous Information | Yes | |
| §63.10(a) | Record Keeping and Reporting-Applicability | Yes | |
| §63.10(b) | Records | Yes | Except that §63.10(b)(2)(xiii) applies if you use a continuous emission monitoring system to meet the NSPS or you elect to meet the NSPS, CO, or $SO_2$ reduced sulfur limit and the performance evaluation requires a relative accuracy test audit. |

| | | | |
|---|---|---|---|
| §63.10(c)(1)-(6), (9)-(15) | Additional Records for Continuous Monitoring Systems | Yes | Except that these requirements apply if you use a continuous opacity monitoring system or a continuous emission monitoring system to meet the NSPS or elect to meet the NSPS opacity, CO, or $SO_2$ limits. |
| §63.10(c)(7)-(8) | Records of Excess Emissions and Exceedances | No | Subpart UUU specifies requirements. |
| §63.10(d)(1) | General Reporting Requirements | Yes | |
| §63.10(d)(2) | Performance Test Results | No | Subpart UUU requires performance test results to be reported as part of the Notification of Compliance Status due 150 days after the compliance date. |
| §63.10(d)(3) | Opacity or VE Observations | Yes | |
| §63.10(d)(4) | Progress Reports | Yes | |
| §63.10(d)(5)(i) | Startup, Shutdown, and Malfunction Reports | Yes | Except that reports are not required if actions are consistent with the SSM plan, unless requested by permitting authority. |
| §63.10(d)(5)(ii) | | Yes | Except that actions taken during a startup, shut- down, or malfunction that are not consistent with the plan do not need to be reported within 2 and 7 days of commencing and completing the action, respectively, but must be included in the next periodic report. |
| §63.10(e)(1)-(2) | Additional CMS Reports | Yes | Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or $SO_2$ limits. Reports of performance evaluations must be submitted in Notification of Compliance Status. |
| §63.10(e)(3) | Excess Emissions/CMS Performance Reports | No | Subpart UUU specifies the applicable requirements. |
| §63.10(e)(4) | COMS Data Reports | Yes | |
| §63.10(f) | Record Keeping/ Reporting Waiver | Yes | |
| §63.11 | Control Device Requirements | Yes | Applicable to flares. |
| §63.13 | Addresses | Yes | |
| §63.14 | Incorporation by Reference | Yes | |
| §63.15 | Availability of Information | Yes | |

Emissions Unit ID: **P037**

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

Emissions Unit ID: **P802**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| P802 - Scaltech Unit vented to a vapor recovery and control system consisting of an eductor, vapor scrubber tank and carbon canister. In this process, dewatered sludge from the Oily Belt Filter Press (P014) is mixed with water or oil to make a slurry. The slurry product of this process is injected into the coker (P017 or P036) as a replacement for cooling water in the quench cycle. | OAC rule 3745-31-05(A)(3) (PTI 04-1010) | 0.23 pound per hour and 1.0 ton per year of volatile organic compounds (VOC) stack emissions<br><br>3.3 tons per year VOC emissions from equipment leaks<br><br>See section A.I.2.a. |
| | equipment leaks<br>OAC rule 3745-21-09(T) | See section A.I.2.b. |
| | 40 CFR Part 60, Subpart GGG | See section A.I.2.c. |
| | 40 CFR Part 63, Subpart A | See sections A.I.2.d and A.I.2.e. |
| | 40 CFR Part 63, Subpart CC<br>40 CFR 63.648 | See sections A.I.2.e and A.I.2.f. |

**2. Additional Terms and Conditions**

2.a The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(T), 40 CFR Part 60, Subpart GGG, and 40 CFR Part 63, Subpart CC.

2.b Refer to Part II of this permit for the state requirements for equipment leaks found in sections A.I.2., A.II., A.III., A.IV. and A.V., referencing OAC rule 3745-21-09(T).

2.c Equipment leaks that are subject to the provisions of both 40 CFR Part 60, Subpart GGG and 40 CFR Part 63, Subpart CC are required to comply only with the provisions specified in 40 CFR Part 63, Subpart CC.

2.d. 40 CFR Part 63, Subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 63.

2.e. Table 6 of 40 CFR Part 63, Subpart CC specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.f. Refer to Part II of this permit for the applicable equipment leak provisions found in sections A.I.2., A.II., A.III., A.IV. and A.V., referencing 40 CFR Part 60, Subpart VV.

## II. Operational Restrictions

1. See the applicable sections in Part II for equipment leaks in A.II., referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

## III. Monitoring and/or Record Keeping Requirements

1. See the applicable sections in Part II for equipment leaks in A.III., referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. The permittee shall monitor the carbon canister(s) according to one of the following options.

   a. The permittee shall monitor the concentration level of the organic compounds in the exhaust vent stream from the carbon adsorption system, and the existing carbon shall be replaced with fresh carbon immediately when carbon breakthrough is indicated. The exhaust shall be monitored at intervals no greater than 20 percent of the design carbon replacement interval; or

   b. The permittee shall replace the carbon in the carbon adsorption system with fresh carbon at a regular pre-determined interval that is less than the carbon replacement interval that is determined by the maximum design flow rate and organic concentration in the gas stream vented to the carbon adsorption system.

3. The permittee shall maintain records of the following information related to the carbon canister(s).

   a. the date and time the concentration level of organic compounds in the exhaust vent is monitored and a notation of whether or not carbon breakthrough is detected; and

   b. the replacement dates of the carbon canister(s).

## IV. Reporting Requirements

1. See the applicable sections in Part II for equipment leaks in A.IV., referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. The permittee shall submit semi-annual deviation (excursion) reports based on the monitoring option selected under section A.III.2. If the permittee chooses the option under section A.III.2.a, then deviation reports shall be submitted according to paragraphs 2.a and 2.b of this section. If the permittee chooses the option under section A.III.2.b, then deviation reports shall be submitted according to paragraphs 2.c of this section. The deviation reports shall identify the following information:

   a. each period when the carbon canister(s) was (were) not replaced with fresh carbon immediately when carbon breakthrough was indicated;

   b. each period when the exhaust was not monitored within 20 percent of the design carbon replacement interval; and

   c. each period when carbon canister is not replaced within a period less than the design replacement interval.

   If no deviations occurred during the 6-month period, then the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

   These reports shall be submitted semi-annually, i.e., by January 30 and July 30 of each year, and shall cover the previous 6 calendar months.

## V. Testing Requirements

1. See the applicable sections in Part II for equipment leaks in A.V., referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. Compliance with the emission limitation(s) of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emission Limitation:

      0.23 pound per hour VOC stack emissions

      Applicable Compliance Method:

      If required, the permittee shall demonstrate compliance using Methods 1 through 4 and 25A of 40 CFR Part 60, Appendix A.

   b. Emission Limitation

      1.0 ton/yr VOC stack emissions

      Applicable Compliance Method:

Since the annual emission limitation is based on the hourly emission limit at 8760 hours per year, compliance with the hourly emission limitation constitutes compliance with the annual emission limitation.

c. Emission Limitation

3.3 tons/yr VOC emissions from equipment leaks

Applicable Compliance Method:

Compliance shall be demonstrated by the monitoring, record keeping, and reporting requirements under sections A.III.1 and A.IV.1.

The monitoring, record keeping and reporting requirements under sections A.III.1 and A.IV.1 shall serve as demonstration of compliance. The allowable emission rate from equipment leaks was determined by multiplying the total number of components by a leaking factor of 2% of the total components. This product is then multiplied by the corresponding leak screening value correlation, multiplied by 2.2 lbs/kg, multiplied by 8760 hours per year, and divided by 2000 pounds per ton to obtain the VOC emission rate in tons per year for each type of leaking component for a total of 3.3 tons per year VOC emissions from equipment leaks. The leak screening values are listed in tables 2-10 and 2-14 of *Protocol for Equipment Leak Emission Estimates* (EPA document 453/R-95-017 or subsequent updates).

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T010 is a 69,193.9 barrel storage tank identified as PR-500152. The tank has an internal floating roof with a flexible wiper primary seal. It is currently operated as a Group 1 storage vessel under 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(L) | See sections A.I.2.a through A.I.2.c. |
| | 40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.d through A.I.2.g and A.II.1. |

**2. Additional Terms and Conditions**

2.a The fixed roof storage tank shall be equipped with an internal floating roof.

2.b The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

2.c All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

2.d Each permittee of a Group 1 storage vessel subject to 40 CFR Part 63, Subpart CC shall comply with the requirements of 40 CFR 63.119 through 63.121 (Subpart G) except as provided in 63.646(b) through 63.646(l) of Subpart CC.

2.e Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

2.f The permittee who uses a fixed roof and an internal floating roof shall comply with the requirements specified in 40 CFR 63.119(b)(1), (2) and (3) [See section A.II.].

2.g To demonstrate compliance with 40 CFR 63.119(b) of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements of 63.120(a) of Subpart G [See section A.III.].

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply to Group 1 storage vessels at existing sources:

   a. If a cover or lid is installed on an opening on a floating roof, the cover or lid shall remain closed except when the cover or lid must be open for access.

   b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

   c. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

2. [40 CFR 63.119(b)]
[Note: The intent of 40 CFR 63.119(b)(1) and (b)(2) of Subpart G is to avoid having a vapor space between the floating roof and the stored liquid for extended periods. Storage vessels may be emptied for purposes such as routine storage vessel maintenance, inspections, petroleum liquid deliveries, or transfer operations. Storage vessels where liquid is left on walls, as bottom clingage, or in pools due to floor irregularity are considered completely empty.]

   a. [40 CFR 63.119(b)(1)]
   The internal floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

      i. during the initial fill;

      ii. after the vessel has been completely emptied and degassed; and

      iii. when the vessel is completely emptied before being subsequently refilled.

   b. [40 CFR 63.119(b)(2)]
   When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

   c. [40 CFR 63.119(b)(3)]
   Each internal floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. Except as provided in paragraph iv. of this section, the closure device shall consist of one of the devices listed in paragraphs i., ii., or iii. of this section.

      i. A liquid-mounted seal as defined in 40 CFR 63.111.

ii. A metallic shoe seal as defined in 40 CFR 63.111.

iii. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor- mounted, but both must be continuous seals.

iv. If the internal floating roof is equipped with a vapor-mounted seal as of July 15, 1994, the requirement for one of the seal options specified in paragraphs i., ii., and iii. of this section does not apply until the earlier of the dates: the next time the storage vessel is emptied and degassed or no later than 10 years after August 18, 1995.

## III. Monitoring and/or Record Keeping Requirements

1. [OAC 3745-21-09(L)]
The permittee shall maintain records of the following information:

a. the types of petroleum liquids stored in the tank; and

b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

2. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

3. [40 CFR 63.646(b)]
As used in 40 CFR Part 63, Subpart CC, all terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 40 CFR 63.119 of Subpart G.

a. [40 CFR 63.646(b)(1)]
The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

b. [40 CFR 63.646(b)(2)]
When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage

vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

4. [40 CFR 63.120(a)] INSPECTIONS
To demonstrate compliance with 40 CFR 63.119(b) [See section A.I.2.f.] of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements in the paragraphs a., b. and c. of this section.

a. [40 CFR 63.120(a)(1)]
The permittee shall visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), according to the schedule specified in 40 CFR 63.120(a)(2), see paragraph b. of this section.

b. [40 CFR 63.120(a)(2), (a)(2)(i) and (a)(2)(ii)]
For vessels equipped with a single-seal system, the permittee shall perform the inspections specified in paragraphs i. and ii. of this section.

i. The permittee shall visually inspect the internal floating roof and the seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill, or at least once every 12 months after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

ii. The permittee shall visually inspect the internal floating roof and the seal each time the vessel is emptied and degassed and at least once every 10 years after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

[Note: The permittee is not required to comply with the provisions for gaskets, slotted membranes and sleeve seals in 40 CFR 63.120(a)(2). This exemption is found under 40 CFR 63.646(e).]

c. [40 CFR 63.120(a)(4)]
If during the inspections required by 40 CFR 63.120(a)(2)(i) [see paragraph b. of this section], the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached; or there are holes or tears in the seal fabric; or there are visible gaps between the seal and the wall of the storage vessel, the permittee shall repair the items or empty and remove the storage vessel from service within 45 calendar days. If a failure that is detected during inspections required by paragraph b.i of this section cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

d. [40 CFR 63.120(a)(7)]
If during the inspections required by 40 CFR 63.120(a)(2)(ii) [see paragraph b. of this section], the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with organic HAP.

5. [40 CFR 63.646(e)]
When complying with the inspection requirements of 40 CFR 63.120 of Subpart G, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(c)]
The permittee shall keep a record that each inspection required by 40 CFR 63.120(a) [See section A.III.] was performed.

c. [40 CFR 63.123(g)]
The permittee who elects to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(a)(4) [See section A.III.] shall keep in a readily accessible location, the documentation specified in 63.120(a)(4) [See section A.III.] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

## IV. Reporting Requirements

1. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator | Toledo Division of Environmental Services

c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

2. [40 CFR 63.646(l)]
The State or local permitting authority can waive the notification requirements of 40 CFR 63.120(a)(5), 63.120(a)(6), 63.120(b)(10)(ii), and 63.120(b)(10)(iii) for all or some storage vessels at petroleum refineries subject to this subpart. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notifications in 40 CFR 63.120(a)(6) or 63.120(b)(10)(iii) for all storage vessels at a refinery or for individual storage vessels on a case-by-case basis.

3. [40 CFR 63.654(g)]
The permittee shall submit Periodic Reports no later than 60 days after the end of each 6-month period when any of the compliance exceptions specified in paragraphs a. and b. below, occur. The first 6-month period shall begin on the date the Notification of Compliance Status report is required to be submitted. (Existing Group 1 storage vessels shall be in compliance at the first degassing and cleaning activity after August 18, 1998, or by August 18, 2005, whichever is first [40 CFR 63.640(h)(4)]). A Periodic Report is not required if none of the compliance exceptions specified in paragraphs a. and b. occurred during the 6-month period unless emissions averaging is utilized.. The permittee may submit reports required by other regulations in place of or as part of the Periodic Report required by this paragraph if the reports contain the information required by paragraphs a. and b. below.

a. [40 CFR 63.654(g)(1)]
For storage vessels, Periodic Reports shall include the information specified for Periodic Reports in paragraph b., except that information related to gaskets, slotted membranes, and sleeve seals is not required for storage vessels that are part of an existing source.

b. [40 CFR 63.654(g)(2) and (2)(i)(A) through (2)(i)(C)]
The permittee shall submit the results of each inspection conducted in accordance with 40 CFR 63.120(a) of subpart G [See section A.III.] in which a failure is detected in the control equipment. For vessels for which annual inspections are required under 63.120(a)(2)(i) [See section A.III.], the specifications and requirements listed in paragraphs i. through iii. of this section apply.

i. A failure is defined as any time in which the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached from the internal floating roof; or there are holes, and date the repair was made or the date the storage vessel was emptied.

ii. Except as provided in paragraph iii. of this section, each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a

failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made or the date the storage vessel was emptied.

iii. If an extension is utilized in accordance with 40 CFR 63.120(a)(4) of Subpart G, [See section A.III.], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 63.120(a)(4) of Subpart G, [See section A.III.]; and describe the date the storage vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(2)(ii) and (2)(ii)(A) through (2)(ii)(B)]
For vessels for which inspections are required under 40 CFR 63.120(a)(2)(ii) [See section A.III.] (i.e., internal inspections), the specifications and requirements listed in paragraphs i. through ii. of this section apply.

i. A failure is defined as any time in which the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal (if one has been installed) has holes, tears, or other openings in the seal or the seal fabric.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

4. [40 CFR 63.654(h)(2) and (h)(2)(i)]
Reports shall be submitted as specified in Subpart A of 40 CFR Part 63 and for storage vessels, notifications of inspections as specified in the following paragraphs, a. through c. In order to afford the Administrator the opportunity to have an observer present, the permittee shall notify the Administrator of the refilling of each Group 1 storage vessel that has been emptied and degassed.

a. [40 CFR 63.654(h)(2)(i)(A)]
Except as provided in paragraphs b. and c. of this section, the permittee shall notify the Administrator in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP's to afford the Administrator the opportunity to inspect the storage vessel prior to refilling.

b. [40 CFR 63.654(h)(2)(i)(B)]
Except as provided in paragraph c. of this section, if the internal inspection required by 40 CFR 63.120(a)(2), is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP's, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. This notification, including the written documentation, may also be made in writing and sent so that it is received by the Administrator at least 7 calendar days prior to the refilling.

c. [40 CFR 63.654(h)(2)(i)(C)]
The State or local permitting authority can waive the notification requirements of paragraph a. and/or b. of this section for all or some storage vessels at petroleum refineries subject to 40 CFR Part 63, Subpart CC. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph a. of this section or sooner than 7 days after submitting the notification required by paragraph b. of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

Emissions Unit ID: T011

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T011 is a 80,232.05 barrel storage tank identified as PR-500153. The tank has an internal floating roof with a flexible wiper primary seal. It is currently operated as a Group 1 storage vessel under 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(L) | See sections A.I.2.a through A.I.2.c. |
| | 40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.d through A.I.2.g and A.II.1. |

**2. Additional Terms and Conditions**

2.a The fixed roof storage tank shall be equipped with an internal floating roof.

2.b The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

2.c All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

2.d Each permittee of a Group 1 storage vessel subject to 40 CFR Part 63, Subpart CC shall comply with the requirements of 40 CFR 63.119 through 63.121 (Subpart G) except as provided in 63.646(b) through 63.646(l) of Subpart CC.

2.e Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

2.f The permittee who uses a fixed roof and an internal floating roof shall comply with the requirements specified in 40 CFR 63.119(b)(1), (2) and (3) [See section A.II.].

2.g To demonstrate compliance with 40 CFR 63.119(b) of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements of 63.120(a) of Subpart G [See section A.III.].

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply to Group 1 storage vessels at existing sources:

   a. If a cover or lid is installed on an opening on a floating roof, the cover or lid shall remain closed except when the cover or lid must be open for access.

   b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

   c. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

2. [40 CFR 63.119(b)]
[Note: The intent of 40 CFR 63.119(b)(1) and (b)(2) of Subpart G is to avoid having a vapor space between the floating roof and the stored liquid for extended periods. Storage vessels may be emptied for purposes such as routine storage vessel maintenance, inspections, petroleum liquid deliveries, or transfer operations. Storage vessels where liquid is left on walls, as bottom clingage, or in pools due to floor irregularity are considered completely empty.]

   a. [40 CFR 63.119(b)(1)]
   The internal floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

      i. during the initial fill;

      ii. after the vessel has been completely emptied and degassed; and

      iii. when the vessel is completely emptied before being subsequently refilled.

   b. [40 CFR 63.119(b)(2)]
   When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

   c. [40 CFR 63.119(b)(3)]
   Each internal floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. Except as provided in paragraph iv. of this section, the closure device shall consist of one of the devices listed in paragraphs i., ii., or iii. of this section.

      i. A liquid-mounted seal as defined in 40 CFR 63.111.

ii. A metallic shoe seal as defined in 40 CFR 63.111.

iii. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor- mounted, but both must be continuous seals.

iv. If the internal floating roof is equipped with a vapor-mounted seal as of July 15, 1994, the requirement for one of the seal options specified in paragraphs i., ii., and iii. of this section does not apply until the earlier of the dates: the next time the storage vessel is emptied and degassed or no later than 10 years after August 18, 1995.

## III. Monitoring and/or Record Keeping Requirements

1. [OAC 3745-21-09(L)]
The permittee shall maintain records of the following information:

a. the types of petroleum liquids stored in the tank; and

b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

2. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

3. [40 CFR 63.646(b)]
As used in 40 CFR Part 63, Subpart CC, all terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 40 CFR 63.119 of Subpart G.

a. [40 CFR 63.646(b)(1)]
The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

b. [40 CFR 63.646(b)(2)]
When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage

vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

4. [40 CFR 63.120(a)] INSPECTIONS
To demonstrate compliance with 40 CFR 63.119(b) [See section A.I.2.f.] of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements in the paragraphs a., b. and c. of this section.

a. [40 CFR 63.120(a)(1)]
The permittee shall visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), according to the schedule specified in 40 CFR 63.120(a)(2), see paragraph b. of this section.

b. [40 CFR 63.120(a)(2), (a)(2)(i) and (a)(2)(ii)]
For vessels equipped with a single-seal system, the permittee shall perform the inspections specified in paragraphs i. and ii. of this section.

i. The permittee shall visually inspect the internal floating roof and the seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill, or at least once every 12 months after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

ii. The permittee shall visually inspect the internal floating roof and the seal each time the vessel is emptied and degassed and at least once every 10 years after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

[Note: The permittee is not required to comply with the provisions for gaskets, slotted membranes and sleeve seals in 40 CFR 63.120(a)(2). This exemption is found under 40 CFR 63.646(e).]

c. [40 CFR 63.120(a)(4)]
If during the inspections required by 40 CFR 63.120(a)(2)(i) [see paragraph b. of this section], the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached; or there are holes or tears in the seal fabric; or there are visible gaps between the seal and the wall of the storage vessel, the permittee shall repair the items or empty and remove the storage vessel from service within 45 calendar days. If a failure that is detected during inspections required by paragraph b.i of this section cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

d. [40 CFR 63.120(a)(7)]
If during the inspections required by 40 CFR 63.120(a)(2)(ii) [see paragraph b. of this section], the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with organic HAP.

5. [40 CFR 63.646(e)]
When complying with the inspection requirements of 40 CFR 63.120 of Subpart G, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(c)]
The permittee shall keep a record that each inspection required by 40 CFR 63.120(a) [See section A.III.] was performed.

c. [40 CFR 63.123(g)]
The permittee who elects to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(a)(4) [See section A.III.] shall keep in a readily accessible location, the documentation specified in 63.120(a)(4) [See section A.III.] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

## IV. Reporting Requirements

1. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator | Toledo Division of Environmental Services

c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

2. [40 CFR 63.646(l)]
The State or local permitting authority can waive the notification requirements of 40 CFR 63.120(a)(5), 63.120(a)(6), 63.120(b)(10)(ii), and 63.120(b)(10)(iii) for all or some storage vessels at petroleum refineries subject to this subpart. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notifications in 40 CFR 63.120(a)(6) or 63.120(b)(10)(iii) for all storage vessels at a refinery or for individual storage vessels on a case-by-case basis.

3. [40 CFR 63.654(g)]
The permittee shall submit Periodic Reports no later than 60 days after the end of each 6-month period when any of the compliance exceptions specified in paragraphs a. and b. below, occur. The first 6-month period shall begin on the date the Notification of Compliance Status report is required to be submitted. (Existing Group 1 storage vessels shall be in compliance at the first degassing and cleaning activity after August 18, 1998, or by August 18, 2005, whichever is first [40 CFR 63.640(h)(4)]). A Periodic Report is not required if none of the compliance exceptions specified in paragraphs a. and b. occurred during the 6-month period unless emissions averaging is utilized.. The permittee may submit reports required by other regulations in place of or as part of the Periodic Report required by this paragraph if the reports contain the information required by paragraphs a. and b. below.

a. [40 CFR 63.654(g)(1)]
For storage vessels, Periodic Reports shall include the information specified for Periodic Reports in paragraph b., except that information related to gaskets, slotted membranes, and sleeve seals is not required for storage vessels that are part of an existing source.

b. [40 CFR 63.654(g)(2) and (2)(i)(A) through (2)(i)(C)]
The permittee shall submit the results of each inspection conducted in accordance with 40 CFR 63.120(a) of subpart G [See section A.III.] in which a failure is detected in the control equipment. For vessels for which annual inspections are required under 63.120(a)(2)(i) [See section A.III.], the specifications and requirements listed in paragraphs i. through iii. of this section apply.

i. A failure is defined as any time in which the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached from the internal floating roof; or there are holes, and date the repair was made or the date the storage vessel was emptied.

ii. Except as provided in paragraph iii. of this section, each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a

failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made or the date the storage vessel was emptied.

iii. If an extension is utilized in accordance with 40 CFR 63.120(a)(4) of Subpart G, [See section A.III.], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 63.120(a)(4) of Subpart G, [See section A.III.]; and describe the date the storage vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(2)(ii) and (2)(ii)(A) through (2)(ii)(B)]
For vessels for which inspections are required under 40 CFR 63.120(a)(2)(ii) [See section A.III.] (i.e., internal inspections), the specifications and requirements listed in paragraphs i. through ii. of this section apply.

i. A failure is defined as any time in which the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal (if one has been installed) has holes, tears, or other openings in the seal or the seal fabric.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

4. [40 CFR 63.654(h)(2) and (h)(2)(i)]
Reports shall be submitted as specified in Subpart A of 40 CFR Part 63 and for storage vessels, notifications of inspections as specified in the following paragraphs, a. through c. In order to afford the Administrator the opportunity to have an observer present, the permittee shall notify the Administrator of the refilling of each Group 1 storage vessel that has been emptied and degassed.

a. [40 CFR 63.654(h)(2)(i)(A)]
Except as provided in paragraphs b. and c. of this section, the permittee shall notify the Administrator in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP's to afford the Administrator the opportunity to inspect the storage vessel prior to refilling.

b. [40 CFR 63.654(h)(2)(i)(B)]
Except as provided in paragraph c. of this section, if the internal inspection required by 40 CFR 63.120(a)(2), is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP's, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. This notification, including the written documentation, may also be made in writing and sent so that it is received by the Administrator at least 7 calendar days prior to the refilling.

c. [40 CFR 63.654(h)(2)(i)(C)]
The State or local permitting authority can waive the notification requirements of paragraph a. and/or b. of this section for all or some storage vessels at petroleum refineries subject to 40 CFR Part 63, Subpart CC. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph a. of this section or sooner than 7 days after submitting the notification required by paragraph b. of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T012 is a 2,538.08 barrel storage tank identified as PR-500154. The tank has an internal floating roof with dual seals. It is currently operated as a Group 1 storage vessel under 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(L) | See sections A.I.2.a through A.I.2.c. |
| | 40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.d through A.I.2.g and A.II.1. |

**2. Additional Terms and Conditions**

2.a The fixed roof storage tank shall be equipped with an internal floating roof.

2.b The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

2.c All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

2.d Each permittee of a Group 1 storage vessel subject to 40 CFR Part 63, Subpart CC shall comply with the requirements of 40 CFR 63.119 through 63.121 (Subpart G) except as provided in 63.646(b) through 63.646(l) of Subpart CC.

2.e Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

2.f The permittee who uses a fixed roof and an internal floating roof shall comply with the requirements specified in 40 CFR 63.119(b)(1), (2) and (3) [See section A.II.].

2.g To demonstrate compliance with 40 CFR 63.119(b) of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements of 63.120(a) of Subpart G [See section A.III.].

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply to Group 1 storage vessels at existing sources:

   a. If a cover or lid is installed on an opening on a floating roof, the cover or lid shall remain closed except when the cover or lid must be open for access.

   b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

   c. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

2. [40 CFR 63.119(b)]
[Note: The intent of 40 CFR 63.119(b)(1) and (b)(2) of Subpart G is to avoid having a vapor space between the floating roof and the stored liquid for extended periods. Storage vessels may be emptied for purposes such as routine storage vessel maintenance, inspections, petroleum liquid deliveries, or transfer operations. Storage vessels where liquid is left on walls, as bottom clingage, or in pools due to floor irregularity are considered completely empty.]

   a. [40 CFR 63.119(b)(1)]
   The internal floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

      i. during the initial fill;

      ii. after the vessel has been completely emptied and degassed; and

      iii. when the vessel is completely emptied before being subsequently refilled.

   b. [40 CFR 63.119(b)(2)]
   When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

   c. [40 CFR 63.119(b)(3)]
   Each internal floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. Except as provided in paragraph iv. of this section, the closure device shall consist of one of the devices listed in paragraphs i., ii., or iii. of this section.

      i. A liquid-mounted seal as defined in 40 CFR 63.111.

ii. A metallic shoe seal as defined in 40 CFR 63.111.

iii. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor- mounted, but both must be continuous seals.

iv. If the internal floating roof is equipped with a vapor-mounted seal as of July 15, 1994, the requirement for one of the seal options specified in paragraphs i., ii., and iii. of this section does not apply until the earlier of the dates: the next time the storage vessel is emptied and degassed or no later than 10 years after August 18, 1995.

## III. Monitoring and/or Record Keeping Requirements

1. [OAC 3745-21-09(L)]
The permittee shall maintain records of the following information:

a. the types of petroleum liquids stored in the tank; and

b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

2. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

3. [40 CFR 63.646(b)]
As used in 40 CFR Part 63, Subpart CC, all terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 40 CFR 63.119 of Subpart G.

a. [40 CFR 63.646(b)(1)]
The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

b. [40 CFR 63.646(b)(2)]
When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage

vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

4. [40 CFR 63.120(a)] INSPECTIONS
To demonstrate compliance with 40 CFR 63.119(b) [See section A.I.2.f.] of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements in the paragraphs a., b. and c. of this section.

a. [40 CFR 63.120(a)(1)]
The permittee shall visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), according to the schedule specified in 63.120(a)(3), see paragraph b. of this section.

b. [40 CFR 63.120(a)(3); (a)(3)(i) - (a)(3)(iii)]
For vessels equipped with a double-seal system, the permittee shall perform either the inspection required by paragraph i. of this section or the inspections required by both paragraphs ii. and iii. of this section.

i. Visually inspect the internal floating roof , the primary seal, and secondary seal each time the storage vessel is emptied and degassed and at least once every 5 years after the first degassing and cleaning activity after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

ii. The permittee shall visually inspect the internal floating roof and the secondary seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill, or at least once every 12 months after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

iii. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal each time the vessel is emptied and degassed and at least once every 10 years after the first degassing and cleaning activity after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

[Note: The permittee is not required to comply with the provisions for gaskets, slotted membranes and sleeve seals in 40 CFR 63.120(a)(3). This exemption is found under 40 CFR 63.646(e).]

c. [40 CFR 63.120(a)(4)]
If during the inspections required by b.ii of this section, the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached; or there are holes or tears in the seal fabric; or there are visible gaps between the seal and the wall of the storage vessel, the permittee shall repair the items or empty and remove the storage vessel from service within 45 calendar days. If a failure that is detected during inspections required by paragraph b.ii of this section cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to

utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

d. [40 CFR 63.120(a)(7)]
If during the inspections required by 40 CFR 63.120(a)(3)(i) or (a)(3)(iii) [see paragraph b. of this section], the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with organic HAP.

5. [40 CFR 63.646(e)]
When complying with the inspection requirements of 40 CFR 63.120 of Subpart G, the permittees of storage vessels at existing sources subject to 40 CFR Part 63, Subpart CC, are not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(c)]
The permittee shall keep a record that each inspection required by 40 CFR 63.120(a) [See section A.III.] was performed.

c. [40 CFR 63.123(g)]
The permittee who elects to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(a)(4) [See section A.III.] shall keep in a readily accessible location, the documentation specified in 63.120(a)(4) [See section A.III.] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

## IV. Reporting Requirements

1. [40 CFR 63.642(f)]

All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

2. [40 CFR 63.646(l)]
The State or local permitting authority can waive the notification requirements of 40 CFR 63.120(a)(5), 63.120(a)(6), 63.120(b)(10)(ii), and 63.120(b)(10)(iii) for all or some storage vessels at petroleum refineries subject to this subpart. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notifications in 40 CFR 63.120(a)(6) or 63.120(b)(10)(iii) for all storage vessels at a refinery or for individual storage vessels on a case-by-case basis.

3. [40 CFR 63.654(g)]
The permittee shall submit Periodic Reports no later than 60 days after the end of each 6-month period when any of the compliance exceptions specified in paragraphs a. and b. below, occur. The first 6-month period shall begin on the date the Notification of Compliance Status report is required to be submitted. (Existing Group 1 storage vessels shall be in compliance at the first degassing and cleaning activity after August 18, 1998, or by August 18, 2005, whichever is first [40 CFR 63.640(h)(4)]). A Periodic Report is not required if none of the compliance exceptions specified in paragraphs a. and b. occurred during the 6-month period unless emissions averaging is utilized.. The permittee may submit reports required by other regulations in place of or as part of the Periodic Report required by this paragraph if the reports contain the information required by paragraphs a. and b. below.

a. [40 CFR 63.654(g)(1)]
For storage vessels, Periodic Reports shall include the information specified for Periodic Reports in paragraph b., except that information related to gaskets, slotted membranes, and sleeve seals is not required for storage vessels that are part of an existing source.

b. [40 CFR 63.654(g)(2) and (2)(i)(A) through (2)(i)(C)]
The permittee shall submit the results of each inspection conducted in accordance with 40 CFR 63.120(a) of Subpart G [See section A.III.] in which a failure is detected in the control equipment. For vessels for which annual inspections are required under 63.120(a)(3)(ii) [See section A.III.], the specifications and requirements listed in paragraphs i. through iii. of this section apply.

i. A failure is defined as any time in which the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg

supports; or there is liquid on the floating roof; or the seal is detached from the internal floating roof; or there are holes, and date the repair was made or the date the storage vessel was emptied.

ii. Except as provided in paragraph iii. of this section, each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made or the date the storage vessel was emptied.

iii. If an extension is utilized in accordance with 40 CFR 63.120(a)(4) of Subpart G, [See section A.III.], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 63.120(a)(4) of Subpart G, [See section A.III.]; and describe the date the storage vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(2)(ii) and (2)(ii)(A) through (2)(ii)(B)]
For vessels for which inspections are required under 40 CFR 63.120(a)(3)(i) or (a)(3)(iii) [See section A.III.] (i.e., internal inspections), the specifications and requirements listed in paragraphs i. through ii. of this section apply.

i. A failure is defined as any time in which the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal (if one has been installed) has holes, tears, or other openings in the seal or the seal fabric.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

4. [40 CFR 63.654(h)(2) and (h)(2)(i)]
Reports shall be submitted as specified in Subpart A of 40 CFR Part 63 and for storage vessels, notifications of inspections as specified in the following paragraphs, a. through c. In order to afford the Administrator the opportunity to have an observer present, the permittee shall notify the Administrator of the refilling of each Group 1 storage vessel that has been emptied and degassed.

a. [40 CFR 63.654(h)(2)(i)(A)]
Except as provided in paragraphs b. and c. of this section, the permittee shall notify the Administrator in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP's to afford the Administrator the opportunity to inspect the storage vessel prior to refilling.

b. [40 CFR 63.654(h)(2)(i)(B)]
Except as provided in paragraph c. of this section, if the internal inspection required by 40 CFR 63.120(a)(3), is not planned and the permittee could not have known about the

inspection 30 calendar days in advance of refilling the vessel with organic HAP's, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. This notification, including the written documentation, may also be made in writing and sent so that it is received by the Administrator at least 7 calendar days prior to the refilling.

c. [40 CFR 63.654(h)(2)(i)(C)]
The State or local permitting authority can waive the notification requirements of paragraph a. and/or b. of this section for all or some storage vessels at petroleum refineries subject to 40 CFR Part 63, Subpart CC. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph a. of this section or sooner than 7 days after submitting the notification required by paragraph b. of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T013 is a 54,593.71 barrel storage tank identified as PR-500124. The tank has an internal floating roof with dual seals. It is currently operated as a Group 1 storage vessel under 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(L) | See sections A.I.2.a through A.I.2.c. |
| | 40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.d through A.I.2.g and A.II.1. |

**2. Additional Terms and Conditions**

2.a The fixed roof storage tank shall be equipped with an internal floating roof.

2.b The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

2.c All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

2.d Each permittee of a Group 1 storage vessel subject to 40 CFR Part 63, Subpart CC shall comply with the requirements of 40 CFR 63.119 through 63.121 (Subpart G) except as provided in 63.646(b) through 63.646(l) of Subpart CC.

2.e Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

2.f The permittee who uses a fixed roof and an internal floating roof shall comply with the requirements specified in 40 CFR 63.119(b)(1), (2) and (3) [See section A.II.].

2.g To demonstrate compliance with 40 CFR 63.119(b) of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements of 63.120(a) of Subpart G [See section A.III.].

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply to Group 1 storage vessels at existing sources:

   a. If a cover or lid is installed on an opening on a floating roof, the cover or lid shall remain closed except when the cover or lid must be open for access.

   b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

   c. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

2. [40 CFR 63.119(b)]
[Note: The intent of 40 CFR 63.119(b)(1) and (b)(2) of Subpart G is to avoid having a vapor space between the floating roof and the stored liquid for extended periods. Storage vessels may be emptied for purposes such as routine storage vessel maintenance, inspections, petroleum liquid deliveries, or transfer operations. Storage vessels where liquid is left on walls, as bottom clingage, or in pools due to floor irregularity are considered completely empty.]

   a. [40 CFR 63.119(b)(1)]
   The internal floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

      i. during the initial fill;

      ii. after the vessel has been completely emptied and degassed; and

      iii. when the vessel is completely emptied before being subsequently refilled.

   b. [40 CFR 63.119(b)(2)]
   When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

   c. [40 CFR 63.119(b)(3)]
   Each internal floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. Except as provided in paragraph iv. of this section, the closure device shall consist of one of the devices listed in paragraphs i., ii., or iii. of this section.

      i. A liquid-mounted seal as defined in 40 CFR 63.111.

ii. A metallic shoe seal as defined in 40 CFR 63.111.

iii. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor- mounted, but both must be continuous seals.

iv. If the internal floating roof is equipped with a vapor-mounted seal as of July 15, 1994, the requirement for one of the seal options specified in paragraphs i., ii., and iii. of this section does not apply until the earlier of the dates: the next time the storage vessel is emptied and degassed or no later than 10 years after August 18, 1995.

## III. Monitoring and/or Record Keeping Requirements

1. [OAC 3745-21-09(L)]
The permittee shall maintain records of the following information:

a. the types of petroleum liquids stored in the tank; and

b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

2. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

3. [40 CFR 63.646(b)]
As used in 40 CFR Part 63, Subpart CC, all terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 40 CFR 63.119 of Subpart G.

a. [40 CFR 63.646(b)(1)]
The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

b. [40 CFR 63.646(b)(2)]
When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage

vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

4. [40 CFR 63.120(a)] INSPECTIONS
To demonstrate compliance with 40 CFR 63.119(b) [See section A.I.2.f.] of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements in the paragraphs a., b. and c. of this section.

a. [40 CFR 63.120(a)(1)]
The permittee shall visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), according to the schedule specified in 63.120(a)(3), see paragraph b. of this section.

b. [40 CFR 63.120(a)(3); (a)(3)(i) - (a)(3)(iii)]
For vessels equipped with a double-seal system, the permittee shall perform either the inspection required by paragraph i. of this section or the inspections required by both paragraphs ii. and iii. of this section.

i. Visually inspect the internal floating roof , the primary seal, and secondary seal each time the storage vessel is emptied and degassed and at least once every 5 years after the first degassing and cleaning activity after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

ii. The permittee shall visually inspect the internal floating roof and the secondary seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill, or at least once every 12 months after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

iii. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal each time the vessel is emptied and degassed and at least once every 10 years after the first degassing and cleaning activity after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

[Note: The permittee is not required to comply with the provisions for gaskets, slotted membranes and sleeve seals in 40 CFR 63.120(a)(3). This exemption is found under 40 CFR 63.646(e).]

c. [40 CFR 63.120(a)(4)]
If during the inspections required by b.ii of this section, the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached; or there are holes or tears in the seal fabric; or there are visible gaps between the seal and the wall of the storage vessel, the permittee shall repair the items or empty and remove the storage vessel from service within 45 calendar days. If a failure that is detected during inspections required by paragraph b.ii of this section cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to

utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

d. [40 CFR 63.120(a)(7)]
If during the inspections required by 40 CFR 63.120(a)(3)(i) or (a)(3)(iii) [see paragraph b. of this section], the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with organic HAP.

5. [40 CFR 63.646(e)]
When complying with the inspection requirements of 40 CFR 63.120 of Subpart G, the permittees of storage vessels at existing sources subject to 40 CFR Part 63, Subpart CC, are not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(c)]
The permittee shall keep a record that each inspection required by 40 CFR 63.120(a) [See section A.III.] was performed.

c. [40 CFR 63.123(g)]
The permittee who elects to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(a)(4) [See section A.III.] shall keep in a readily accessible location, the documentation specified in 63.120(a)(4) [See section A.III.] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

## IV. Reporting Requirements

1. [40 CFR 63.642(f)]

All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

2. [40 CFR 63.646(l)]
The State or local permitting authority can waive the notification requirements of 40 CFR 63.120(a)(5), 63.120(a)(6), 63.120(b)(10)(ii), and 63.120(b)(10)(iii) for all or some storage vessels at petroleum refineries subject to this subpart. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notifications in 40 CFR 63.120(a)(6) or 63.120(b)(10)(iii) for all storage vessels at a refinery or for individual storage vessels on a case-by-case basis.

3. [40 CFR 63.654(g)]
The permittee shall submit Periodic Reports no later than 60 days after the end of each 6-month period when any of the compliance exceptions specified in paragraphs a. and b. below, occur. The first 6-month period shall begin on the date the Notification of Compliance Status report is required to be submitted. (Existing Group 1 storage vessels shall be in compliance at the first degassing and cleaning activity after August 18, 1998, or by August 18, 2005, whichever is first [40 CFR 63.640(h)(4)]). A Periodic Report is not required if none of the compliance exceptions specified in paragraphs a. and b. occurred during the 6-month period unless emissions averaging is utilized.. The permittee may submit reports required by other regulations in place of or as part of the Periodic Report required by this paragraph if the reports contain the information required by paragraphs a. and b. below.

a. [40 CFR 63.654(g)(1)]
For storage vessels, Periodic Reports shall include the information specified for Periodic Reports in paragraph b., except that information related to gaskets, slotted membranes, and sleeve seals is not required for storage vessels that are part of an existing source.

b. [40 CFR 63.654(g)(2) and (2)(i)(A) through (2)(i)(C)]
The permittee shall submit the results of each inspection conducted in accordance with 40 CFR 63.120(a) of Subpart G [See section A.III.] in which a failure is detected in the control equipment. For vessels for which annual inspections are required under 63.120(a)(3)(ii) [See section A.III.], the specifications and requirements listed in paragraphs i. through iii. of this section apply.

i. A failure is defined as any time in which the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg

supports; or there is liquid on the floating roof; or the seal is detached from the internal floating roof; or there are holes, and date the repair was made or the date the storage vessel was emptied.

ii. Except as provided in paragraph iii. of this section, each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made or the date the storage vessel was emptied.

iii. If an extension is utilized in accordance with 40 CFR 63.120(a)(4) of Subpart G, [See section A.III.], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 63.120(a)(4) of Subpart G, [See section A.III.]; and describe the date the storage vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(2)(ii) and (2)(ii)(A) through (2)(ii)(B)]
For vessels for which inspections are required under 40 CFR 63.120(a)(3)(i) or (a)(3)(iii) [See section A.III.] (i.e., internal inspections), the specifications and requirements listed in paragraphs i. through ii. of this section apply.

i. A failure is defined as any time in which the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal (if one has been installed) has holes, tears, or other openings in the seal or the seal fabric.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

4. [40 CFR 63.654(h)(2) and (h)(2)(i)]
Reports shall be submitted as specified in Subpart A of 40 CFR Part 63 and for storage vessels, notifications of inspections as specified in the following paragraphs, a. through c. In order to afford the Administrator the opportunity to have an observer present, the permittee shall notify the Administrator of the refilling of each Group 1 storage vessel that has been emptied and degassed.

a. [40 CFR 63.654(h)(2)(i)(A)]
Except as provided in paragraphs b. and c. of this section, the permittee shall notify the Administrator in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP's to afford the Administrator the opportunity to inspect the storage vessel prior to refilling.

b. [40 CFR 63.654(h)(2)(i)(B)]
Except as provided in paragraph c. of this section, if the internal inspection required by 40 CFR 63.120(a)(3), is not planned and the permittee could not have known about the

inspection 30 calendar days in advance of refilling the vessel with organic HAP's, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. This notification, including the written documentation, may also be made in writing and sent so that it is received by the Administrator at least 7 calendar days prior to the refilling.

c. [40 CFR 63.654(h)(2)(i)(C)]
The State or local permitting authority can waive the notification requirements of paragraph a. and/or b. of this section for all or some storage vessels at petroleum refineries subject to 40 CFR Part 63, Subpart CC. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph a. of this section or sooner than 7 days after submitting the notification required by paragraph b. of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T014 is a 2,100 barrel storage tank identified as PR-500079. The tank has an internal floating roof with dual seals. It is currently operated as a Group 1 storage vessel under 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(L) | See sections A.I.2.a through A.I.2.c. |
| | 40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.d through A.I.2.g and A.II.1. |

**2. Additional Terms and Conditions**

2.a The fixed roof storage tank shall be equipped with an internal floating roof.

2.b The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

2.c All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

2.d Each permittee of a Group 1 storage vessel subject to 40 CFR Part 63, Subpart CC shall comply with the requirements of 40 CFR 63.119 through 63.121 (Subpart G) except as provided in 63.646(b) through 63.646(l) of Subpart CC.

2.e Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

2.f The permittee who uses a fixed roof and an internal floating roof shall comply with the requirements specified in 40 CFR 63.119(b)(1), (2) and (3) [See section A.II.].

2.g To demonstrate compliance with 40 CFR 63.119(b) of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements of 63.120(a) of Subpart G [See section A.III.].

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply to Group 1 storage vessels at existing sources:

   a. If a cover or lid is installed on an opening on a floating roof, the cover or lid shall remain closed except when the cover or lid must be open for access.

   b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

   c. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

2. [40 CFR 63.119(b)]
[Note: The intent of 40 CFR 63.119(b)(1) and (b)(2) of Subpart G is to avoid having a vapor space between the floating roof and the stored liquid for extended periods. Storage vessels may be emptied for purposes such as routine storage vessel maintenance, inspections, petroleum liquid deliveries, or transfer operations. Storage vessels where liquid is left on walls, as bottom clingage, or in pools due to floor irregularity are considered completely empty.]

   a. [40 CFR 63.119(b)(1)]
   The internal floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

      i. during the initial fill;

      ii. after the vessel has been completely emptied and degassed; and

      iii. when the vessel is completely emptied before being subsequently refilled.

   b. [40 CFR 63.119(b)(2)]
   When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

   c. [40 CFR 63.119(b)(3)]
   Each internal floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. Except as provided in paragraph iv. of this section, the closure device shall consist of one of the devices listed in paragraphs i., ii., or iii. of this section.

      i. A liquid-mounted seal as defined in 40 CFR 63.111.

ii. A metallic shoe seal as defined in 40 CFR 63.111.

iii. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor- mounted, but both must be continuous seals.

iv. If the internal floating roof is equipped with a vapor-mounted seal as of July 15, 1994, the requirement for one of the seal options specified in paragraphs i., ii., and iii. of this section does not apply until the earlier of the dates: the next time the storage vessel is emptied and degassed or no later than 10 years after August 18, 1995.

## III. Monitoring and/or Record Keeping Requirements

1. [OAC 3745-21-09(L)]
The permittee shall maintain records of the following information:

a. the types of petroleum liquids stored in the tank; and

b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

2. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

3. [40 CFR 63.646(b)]
As used in 40 CFR Part 63, Subpart CC, all terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 40 CFR 63.119 of Subpart G.

a. [40 CFR 63.646(b)(1)]
The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

b. [40 CFR 63.646(b)(2)]
When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage

vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

4. [40 CFR 63.120(a)] INSPECTIONS
To demonstrate compliance with 40 CFR 63.119(b) [See section A.I.2.f.] of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements in the paragraphs a., b. and c. of this section.

a. [40 CFR 63.120(a)(1)]
The permittee shall visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), according to the schedule specified in 63.120(a)(3), see paragraph b. of this section.

b. [40 CFR 63.120(a)(3); (a)(3)(i) - (a)(3)(iii)]
For vessels equipped with a double-seal system, the permittee shall perform either the inspection required by paragraph i. of this section or the inspections required by both paragraphs ii. and iii. of this section.

i. Visually inspect the internal floating roof , the primary seal, and secondary seal each time the storage vessel is emptied and degassed and at least once every 5 years after the first degassing and cleaning activity after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

ii. The permittee shall visually inspect the internal floating roof and the secondary seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill, or at least once every 12 months after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

iii. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal each time the vessel is emptied and degassed and at least once every 10 years after the first degassing and cleaning activity after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

[Note: The permittee is not required to comply with the provisions for gaskets, slotted membranes and sleeve seals in 40 CFR 63.120(a)(3). This exemption is found under 40 CFR 63.646(e).]

c. [40 CFR 63.120(a)(4)]
If during the inspections required by b.ii of this section, the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached; or there are holes or tears in the seal fabric; or there are visible gaps between the seal and the wall of the storage vessel, the permittee shall repair the items or empty and remove the storage vessel from service within 45 calendar days. If a failure that is detected during inspections required by paragraph b.ii of this section cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to

utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

d. [40 CFR 63.120(a)(7)]
If during the inspections required by 40 CFR 63.120(a)(3)(i) or (a)(3)(iii) [see paragraph b. of this section], the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with organic HAP.

5. [40 CFR 63.646(e)]
When complying with the inspection requirements of 40 CFR 63.120 of Subpart G, the permittees of storage vessels at existing sources subject to 40 CFR Part 63, Subpart CC, are not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(c)]
The permittee shall keep a record that each inspection required by 40 CFR 63.120(a) [See section A.III.] was performed.

c. [40 CFR 63.123(g)]
The permittee who elects to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(a)(4) [See section A.III.] shall keep in a readily accessible location, the documentation specified in 63.120(a)(4) [See section A.III.] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

## IV. Reporting Requirements

1. [40 CFR 63.642(f)]

All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

2. [40 CFR 63.646(l)]
The State or local permitting authority can waive the notification requirements of 40 CFR 63.120(a)(5), 63.120(a)(6), 63.120(b)(10)(ii), and 63.120(b)(10)(iii) for all or some storage vessels at petroleum refineries subject to this subpart. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notifications in 40 CFR 63.120(a)(6) or 63.120(b)(10)(iii) for all storage vessels at a refinery or for individual storage vessels on a case-by-case basis.

3. [40 CFR 63.654(g)]
The permittee shall submit Periodic Reports no later than 60 days after the end of each 6-month period when any of the compliance exceptions specified in paragraphs a. and b. below, occur. The first 6-month period shall begin on the date the Notification of Compliance Status report is required to be submitted. (Existing Group 1 storage vessels shall be in compliance at the first degassing and cleaning activity after August 18, 1998, or by August 18, 2005, whichever is first [40 CFR 63.640(h)(4)]). A Periodic Report is not required if none of the compliance exceptions specified in paragraphs a. and b. occurred during the 6-month period unless emissions averaging is utilized.. The permittee may submit reports required by other regulations in place of or as part of the Periodic Report required by this paragraph if the reports contain the information required by paragraphs a. and b. below.

a. [40 CFR 63.654(g)(1)]
For storage vessels, Periodic Reports shall include the information specified for Periodic Reports in paragraph b., except that information related to gaskets, slotted membranes, and sleeve seals is not required for storage vessels that are part of an existing source.

b. [40 CFR 63.654(g)(2) and (2)(i)(A) through (2)(i)(C)]
The permittee shall submit the results of each inspection conducted in accordance with 40 CFR 63.120(a) of Subpart G [See section A.III.] in which a failure is detected in the control equipment. For vessels for which annual inspections are required under 63.120(a)(3)(ii) [See section A.III.], the specifications and requirements listed in paragraphs i. through iii. of this section apply.

i. A failure is defined as any time in which the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg

supports; or there is liquid on the floating roof; or the seal is detached from the internal floating roof; or there are holes, and date the repair was made or the date the storage vessel was emptied.

ii. Except as provided in paragraph iii. of this section, each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made or the date the storage vessel was emptied.

iii. If an extension is utilized in accordance with 40 CFR 63.120(a)(4) of Subpart G, [See section A.III.], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 63.120(a)(4) of Subpart G, [See section A.III.]; and describe the date the storage vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(2)(ii) and (2)(ii)(A) through (2)(ii)(B)]
For vessels for which inspections are required under 40 CFR 63.120(a)(3)(i) or (a)(3)(iii) [See section A.III.] (i.e., internal inspections), the specifications and requirements listed in paragraphs i. through ii. of this section apply.

i. A failure is defined as any time in which the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal (if one has been installed) has holes, tears, or other openings in the seal or the seal fabric.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

4. [40 CFR 63.654(h)(2) and (h)(2)(i)]
Reports shall be submitted as specified in Subpart A of 40 CFR Part 63 and for storage vessels, notifications of inspections as specified in the following paragraphs, a. through c. In order to afford the Administrator the opportunity to have an observer present, the permittee shall notify the Administrator of the refilling of each Group 1 storage vessel that has been emptied and degassed.

a. [40 CFR 63.654(h)(2)(i)(A)]
Except as provided in paragraphs b. and c. of this section, the permittee shall notify the Administrator in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP's to afford the Administrator the opportunity to inspect the storage vessel prior to refilling.

b. [40 CFR 63.654(h)(2)(i)(B)]
Except as provided in paragraph c. of this section, if the internal inspection required by 40 CFR 63.120(a)(3), is not planned and the permittee could not have known about the

inspection 30 calendar days in advance of refilling the vessel with organic HAP's, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. This notification, including the written documentation, may also be made in writing and sent so that it is received by the Administrator at least 7 calendar days prior to the refilling.

c. [40 CFR 63.654(h)(2)(i)(C)]
The State or local permitting authority can waive the notification requirements of paragraph a. and/or b. of this section for all or some storage vessels at petroleum refineries subject to 40 CFR Part 63, Subpart CC. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph a. of this section or sooner than 7 days after submitting the notification required by paragraph b. of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

Emissions Unit ID: **T015**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T015 is a 2,100 barrel fixed roof storage vessel identified as tank number PR-500080. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

## II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

3. [OAC 3745-21-09(L)]
   The permittee shall maintain records of the following information:

   a. the types of petroleum liquids stored in the tank; and

   b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

## IV. Reporting Requirements

1. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

2. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T016 is a 79,703.69 barrel petroleum liquid storage tank identified as PR-500154. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z)<br><br>40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.a through A.I.2.e.<br><br>See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised “emission activity category” form, including the results of

the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121, except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

a. [40 CFR 63.119(c)(1)]
The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [See sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL

The secondary seal shall meet the additional requirements specified below:

a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.160(b)(4) [See section A.III].

b. There shall be no holes, tears, or other openings in the seal or seal fabric.

## III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

   a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

   b. the types of petroleum liquids stored in the tank;

   c. the annual throughput of any petroleum liquid stored in the tank; and

   d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
   All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

   a. [40 CFR 63.646(b)(1)]
      The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

   b. [40 CFR 63.646(b)(2)]
      When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

   a. [40 CFR 63.123(a)]
   The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

   b. [40 CFR 63.123(d) (for EFR tanks)]
   The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III].

   c. [40 CFR 63.123(g)]
   When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III.], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III] as applicable.

   d. [40 CFR 63.654(i)(1)(i)]
   Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

   e. [40 CFR 63.654(i)(1)(iv)]
   If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

   a. [40 CFR 63.120(b)(1)]
   Except as provided in 40 CFR 63.120(b)(7) [See section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

      i. [40 CFR 63.120(b)(1)(i)]
      Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

      ii. [40 CFR 63.120(b)(1)(iii)]
      Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

      iii. [40 CFR 63.120(b)(1)(iv)]

If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III.], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27 centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential

danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]
When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be

maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [See section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [See sections A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

   b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]
   If the inspection required by 40 CFR 63.120(b)(10) [See section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written

documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], as

applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [See section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

## V. Testing Requirements
None

## VI. Miscellaneous Requirements
None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T017 is a 79,723.69 barrel petroleum liquid storage tank identified as PR-500155. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z)<br><br>40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.a through A.I.2.e.<br><br>See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised “emission activity category” form, including the results of

the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121, except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

a. [40 CFR 63.119(c)(1)]
The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [See sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL

The secondary seal shall meet the additional requirements specified below:

a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.160(b)(4) [See section A.III].

b. There shall be no holes, tears, or other openings in the seal or seal fabric.

## III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

   a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

   b. the types of petroleum liquids stored in the tank;

   c. the annual throughput of any petroleum liquid stored in the tank; and

   d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
   All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

   a. [40 CFR 63.646(b)(1)]
      The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

   b. [40 CFR 63.646(b)(2)]
      When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

   a. [40 CFR 63.123(a)]
   The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

   b. [40 CFR 63.123(d) (for EFR tanks)]
   The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III].

   c. [40 CFR 63.123(g)]
   When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III.], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III] as applicable.

   d. [40 CFR 63.654(i)(1)(i)]
   Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

   e. [40 CFR 63.654(i)(1)(iv)]
   If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

   a. [40 CFR 63.120(b)(1)]
   Except as provided in 40 CFR 63.120(b)(7) [See section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

      i. [40 CFR 63.120(b)(1)(i)]
      Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

      ii. [40 CFR 63.120(b)(1)(iii)]
      Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

      iii. [40 CFR 63.120(b)(1)(iv)]

If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III.], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27 centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential

danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]
When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be

maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [See section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [See sections A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

   b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]
   If the inspection required by 40 CFR 63.120(b)(10) [See section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written

documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], as

applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [See section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T018 is a 78,665.02 barrel petroleum liquid storage tank identified as PR-500156. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z)<br><br>40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.a through A.I.2.e.<br><br>See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised “emission activity category” form, including the results of

the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121, except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

a. [40 CFR 63.119(c)(1)]
The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [See sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL
The secondary seal shall meet the additional requirements specified below:

   a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.160(b)(4) [See section A.III].

   b. There shall be no holes, tears, or other openings in the seal or seal fabric.

## III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

   a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

   b. the types of petroleum liquids stored in the tank;

   c. the annual throughput of any petroleum liquid stored in the tank; and

   d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

   a. [40 CFR 63.646(b)(1)]
   The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

   b. [40 CFR 63.646(b)(2)]
   When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage

vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(d) (for EFR tanks)]
The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III].

c. [40 CFR 63.123(g)]
When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III.], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

a. [40 CFR 63.120(b)(1)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

i. [40 CFR 63.120(b)(1)(i)]
Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

ii. [40 CFR 63.120(b)(1)(iii)]

Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

iii. [40 CFR 63.120(b)(1)(iv)]
If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III.], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27 centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]

When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [See section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [See sections A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

   b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]

If the inspection required by 40 CFR 63.120(b)(10) [See section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [See section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T019 is a 78,976.93 barrel petroleum liquid storage tank identified as PR-500157. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z)<br><br>40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.a through A.I.2.e.<br><br>See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised “emission activity category” form, including the results of

the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121, except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

a. [40 CFR 63.119(c)(1)]
The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [See sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL
The secondary seal shall meet the additional requirements specified below:

   a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.160(b)(4) [See section A.III].

   b. There shall be no holes, tears, or other openings in the seal or seal fabric.

## III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

   a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

   b. the types of petroleum liquids stored in the tank;

   c. the annual throughput of any petroleum liquid stored in the tank; and

   d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

   a. [40 CFR 63.646(b)(1)]
   The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

   b. [40 CFR 63.646(b)(2)]
   When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage

vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(d) (for EFR tanks)]
The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III].

c. [40 CFR 63.123(g)]
When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III.], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

a. [40 CFR 63.120(b)(1)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

i. [40 CFR 63.120(b)(1)(i)]
Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

ii. [40 CFR 63.120(b)(1)(iii)]

Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

iii. [40 CFR 63.120(b)(1)(iv)]
If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III.], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27 centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]

When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [See section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [See sections A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

   b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]

If the inspection required by 40 CFR 63.120(b)(10) [See section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [See section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T020 is a 146,230 barrel petroleum liquid storage tank identified as PR-500647. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z)<br><br>40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.a through A.I.2.e.<br><br>See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised “emission activity category” form, including the results of

the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121, except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

a. [40 CFR 63.119(c)(1)]
The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [See sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL
The secondary seal shall meet the additional requirements specified below:

   a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.160(b)(4) [See section A.III].

   b. There shall be no holes, tears, or other openings in the seal or seal fabric.

## III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

   a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

   b. the types of petroleum liquids stored in the tank;

   c. the annual throughput of any petroleum liquid stored in the tank; and

   d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

   a. [40 CFR 63.646(b)(1)]
   The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

   b. [40 CFR 63.646(b)(2)]
   When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage

vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(d) (for EFR tanks)]
The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III].

c. [40 CFR 63.123(g)]
When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III.], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

a. [40 CFR 63.120(b)(1)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

i. [40 CFR 63.120(b)(1)(i)]
Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

ii. [40 CFR 63.120(b)(1)(iii)]

Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

iii. [40 CFR 63.120(b)(1)(iv)]
If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III.], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27 centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]

When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [See section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [See sections A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

   b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]

If the inspection required by 40 CFR 63.120(b)(10) [See section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [See section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T021 is a 146,268.8 barrel petroleum liquid storage tank identified as PR-500646. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z)<br><br>40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.a through A.I.2.e.<br><br>See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised “emission activity category” form, including the results of

the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121, except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

a. [40 CFR 63.119(c)(1)]
The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [See sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL
The secondary seal shall meet the additional requirements specified below:

   a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.160(b)(4) [See section A.III].

   b. There shall be no holes, tears, or other openings in the seal or seal fabric.

## III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

   a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

   b. the types of petroleum liquids stored in the tank;

   c. the annual throughput of any petroleum liquid stored in the tank; and

   d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

   a. [40 CFR 63.646(b)(1)]
   The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

   b. [40 CFR 63.646(b)(2)]
   When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage

vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(d) (for EFR tanks)]
The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III].

c. [40 CFR 63.123(g)]
When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III.], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

a. [40 CFR 63.120(b)(1)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

i. [40 CFR 63.120(b)(1)(i)]
Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

ii. [40 CFR 63.120(b)(1)(iii)]

Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

iii. [40 CFR 63.120(b)(1)(iv)]
If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III.], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27 centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]

When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [See section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [See sections A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

   b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]

If the inspection required by 40 CFR 63.120(b)(10) [See section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [See section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T024 is a 147,655.7 barrel petroleum liquid storage tank identified as PR-500812. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z)<br><br>40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.a through A.I.2.e.<br><br>See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised “emission activity category” form, including the results of

the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121, except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

a. [40 CFR 63.119(c)(1)]
The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [See sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL
The secondary seal shall meet the additional requirements specified below:

   a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.160(b)(4) [See section A.III].

   b. There shall be no holes, tears, or other openings in the seal or seal fabric.

## III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

   a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

   b. the types of petroleum liquids stored in the tank;

   c. the annual throughput of any petroleum liquid stored in the tank; and

   d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

   a. [40 CFR 63.646(b)(1)]
   The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

   b. [40 CFR 63.646(b)(2)]
   When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage

vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(d) (for EFR tanks)]
The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III].

c. [40 CFR 63.123(g)]
When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III.], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

a. [40 CFR 63.120(b)(1)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

i. [40 CFR 63.120(b)(1)(i)]
Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

ii. [40 CFR 63.120(b)(1)(iii)]

Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

iii. [40 CFR 63.120(b)(1)(iv)]
If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III.], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27 centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]

When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [See section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [See sections A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

   b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]

If the inspection required by 40 CFR 63.120(b)(10) [See section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [See section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T025 is a 148,123.6 barrel petroleum liquid storage tank identified as PR-500811. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z)<br><br>40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.a through A.I.2.e.<br><br>See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised “emission activity category” form, including the results of

the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121, except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

a. [40 CFR 63.119(c)(1)]
The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [See sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL
The secondary seal shall meet the additional requirements specified below:

   a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.160(b)(4) [See section A.III].

   b. There shall be no holes, tears, or other openings in the seal or seal fabric.

## III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

   a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

   b. the types of petroleum liquids stored in the tank;

   c. the annual throughput of any petroleum liquid stored in the tank; and

   d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

   a. [40 CFR 63.646(b)(1)]
   The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

   b. [40 CFR 63.646(b)(2)]
   When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage

vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(d) (for EFR tanks)]
The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III].

c. [40 CFR 63.123(g)]
When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III.], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

a. [40 CFR 63.120(b)(1)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

i. [40 CFR 63.120(b)(1)(i)]
Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

ii. [40 CFR 63.120(b)(1)(iii)]

Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

iii. [40 CFR 63.120(b)(1)(iv)]
If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III.], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27 centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]

When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [See section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [See sections A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

   b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]

If the inspection required by 40 CFR 63.120(b)(10) [See section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [See section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T026 is a 65,437.34 barrel petroleum liquid storage tank identified as PR-500076. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z)<br><br>40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.a through A.I.2.e.<br><br>See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised “emission activity category” form, including the results of

the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121, except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

a. [40 CFR 63.119(c)(1)]
The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [See sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL
The secondary seal shall meet the additional requirements specified below:

   a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.160(b)(4) [See section A.III].

   b. There shall be no holes, tears, or other openings in the seal or seal fabric.

## III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

   a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

   b. the types of petroleum liquids stored in the tank;

   c. the annual throughput of any petroleum liquid stored in the tank; and

   d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

   a. [40 CFR 63.646(b)(1)]
   The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

   b. [40 CFR 63.646(b)(2)]
   When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage

vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(d) (for EFR tanks)]
The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III].

c. [40 CFR 63.123(g)]
When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III.], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

a. [40 CFR 63.120(b)(1)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

i. [40 CFR 63.120(b)(1)(i)]
Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

ii. [40 CFR 63.120(b)(1)(iii)]

Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

iii. [40 CFR 63.120(b)(1)(iv)]
If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III.], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27 centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]

When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [See section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [See sections A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

   b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]

If the inspection required by 40 CFR 63.120(b)(10) [See section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [See section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T027 is a 42,134.48 barrel petroleum liquid storage tank identified as PR-500186. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z)<br><br>40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.a through A.I.2.e.<br><br>See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised “emission activity category” form, including the results of

the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121, except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

a. [40 CFR 63.119(c)(1)]
The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [See sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL
The secondary seal shall meet the additional requirements specified below:

   a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.160(b)(4) [See section A.III].

   b. There shall be no holes, tears, or other openings in the seal or seal fabric.

## III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

   a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

   b. the types of petroleum liquids stored in the tank;

   c. the annual throughput of any petroleum liquid stored in the tank; and

   d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

   a. [40 CFR 63.646(b)(1)]
   The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

   b. [40 CFR 63.646(b)(2)]
   When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage

vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(d) (for EFR tanks)]
The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III].

c. [40 CFR 63.123(g)]
When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III.], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

a. [40 CFR 63.120(b)(1)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

i. [40 CFR 63.120(b)(1)(i)]
Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

ii. [40 CFR 63.120(b)(1)(iii)]

Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

iii. [40 CFR 63.120(b)(1)(iv)]
If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III.], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27 centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]

When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [See section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [See sections A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

   b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]

If the inspection required by 40 CFR 63.120(b)(10) [See section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [See section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T028 is a 41,937.25 barrel petroleum liquid storage tank identified as PR-500189. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z)<br><br>40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.a through A.I.2.e.<br><br>See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised “emission activity category” form, including the results of

the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121, except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

a. [40 CFR 63.119(c)(1)]
The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [See sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL
The secondary seal shall meet the additional requirements specified below:

   a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.160(b)(4) [See section A.III].

   b. There shall be no holes, tears, or other openings in the seal or seal fabric.

## III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

   a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

   b. the types of petroleum liquids stored in the tank;

   c. the annual throughput of any petroleum liquid stored in the tank; and

   d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

   a. [40 CFR 63.646(b)(1)]
   The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

   b. [40 CFR 63.646(b)(2)]
   When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage

vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(d) (for EFR tanks)]
The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III].

c. [40 CFR 63.123(g)]
When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III.], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

a. [40 CFR 63.120(b)(1)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

i. [40 CFR 63.120(b)(1)(i)]
Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

ii. [40 CFR 63.120(b)(1)(iii)]

Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

iii. [40 CFR 63.120(b)(1)(iv)]
If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III.], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27 centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]

When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [See section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [See sections A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

   b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]

If the inspection required by 40 CFR 63.120(b)(10) [See section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [See section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T029 is a 95,276.64 barrel petroleum liquid storage tank identified as PR-500099. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z)<br><br>40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.a through A.I.2.e.<br><br>See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised “emission activity category” form, including the results of

the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121, except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

a. [40 CFR 63.119(c)(1)]
The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [See sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL
The secondary seal shall meet the additional requirements specified below:

   a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.160(b)(4) [See section A.III].

   b. There shall be no holes, tears, or other openings in the seal or seal fabric.

## III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

   a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

   b. the types of petroleum liquids stored in the tank;

   c. the annual throughput of any petroleum liquid stored in the tank; and

   d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

   a. [40 CFR 63.646(b)(1)]
   The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

   b. [40 CFR 63.646(b)(2)]
   When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage

vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(d) (for EFR tanks)]
The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III].

c. [40 CFR 63.123(g)]
When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III.], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

a. [40 CFR 63.120(b)(1)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

i. [40 CFR 63.120(b)(1)(i)]
Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

ii. [40 CFR 63.120(b)(1)(iii)]

Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

iii. [40 CFR 63.120(b)(1)(iv)]
If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III.], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27 centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]

When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [See section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [See sections A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

   b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]

If the inspection required by 40 CFR 63.120(b)(10) [See section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [See section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T030 is a 147,336.3 barrel petroleum liquid storage tank identified as PR-500813. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z)<br><br>40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.a through A.I.2.e.<br><br>See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised “emission activity category” form, including the results of

the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121, except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

a. [40 CFR 63.119(c)(1)]
The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [See sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL
The secondary seal shall meet the additional requirements specified below:

   a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.160(b)(4) [See section A.III].

   b. There shall be no holes, tears, or other openings in the seal or seal fabric.

## III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

   a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

   b. the types of petroleum liquids stored in the tank;

   c. the annual throughput of any petroleum liquid stored in the tank; and

   d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

   a. [40 CFR 63.646(b)(1)]
   The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

   b. [40 CFR 63.646(b)(2)]
   When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage

vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(d) (for EFR tanks)]
The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III].

c. [40 CFR 63.123(g)]
When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III.], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

a. [40 CFR 63.120(b)(1)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

i. [40 CFR 63.120(b)(1)(i)]
Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

ii. [40 CFR 63.120(b)(1)(iii)]

Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

iii. [40 CFR 63.120(b)(1)(iv)]
If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III.], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27 centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]

When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [See section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [See sections A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

   b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]

If the inspection required by 40 CFR 63.120(b)(10) [See section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [See section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T031 is a 147,742.3 barrel petroleum liquid storage tank identified as PR-500814. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z)<br><br>40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.a through A.I.2.e.<br><br>See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised “emission activity category” form, including the results of

the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121, except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

a. [40 CFR 63.119(c)(1)]
The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [See sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL
The secondary seal shall meet the additional requirements specified below:

   a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.160(b)(4) [See section A.III].

   b. There shall be no holes, tears, or other openings in the seal or seal fabric.

## III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

   a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

   b. the types of petroleum liquids stored in the tank;

   c. the annual throughput of any petroleum liquid stored in the tank; and

   d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

   a. [40 CFR 63.646(b)(1)]
   The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

   b. [40 CFR 63.646(b)(2)]
   When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage

vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(d) (for EFR tanks)]
The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III].

c. [40 CFR 63.123(g)]
When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III.], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

a. [40 CFR 63.120(b)(1)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

i. [40 CFR 63.120(b)(1)(i)]
Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

ii. [40 CFR 63.120(b)(1)(iii)]

Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

iii. [40 CFR 63.120(b)(1)(iv)]
If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III.], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27 centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]

When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [See section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [See sections A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

   b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]

If the inspection required by 40 CFR 63.120(b)(10) [See section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [See section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T032 is a 148,267.3 barrel petroleum liquid storage tank identified as PR-500815. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z)<br><br>40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.a through A.I.2.e.<br><br>See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised “emission activity category” form, including the results of

the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121, except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

a. [40 CFR 63.119(c)(1)]
The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [See sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL
The secondary seal shall meet the additional requirements specified below:

   a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.160(b)(4) [See section A.III].

   b. There shall be no holes, tears, or other openings in the seal or seal fabric.

## III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

   a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

   b. the types of petroleum liquids stored in the tank;

   c. the annual throughput of any petroleum liquid stored in the tank; and

   d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

   a. [40 CFR 63.646(b)(1)]
   The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

   b. [40 CFR 63.646(b)(2)]
   When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage

vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(d) (for EFR tanks)]
The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III].

c. [40 CFR 63.123(g)]
When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III.], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

a. [40 CFR 63.120(b)(1)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

i. [40 CFR 63.120(b)(1)(i)]
Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

ii. [40 CFR 63.120(b)(1)(iii)]

Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

iii. [40 CFR 63.120(b)(1)(iv)]
If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III.], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27 centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]

When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [See section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [See sections A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

   b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]

If the inspection required by 40 CFR 63.120(b)(10) [See section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [See section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T033 is a 148,313 barrel petroleum liquid storage tank identified as PR-500816. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z)<br><br>40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.a through A.I.2.e.<br><br>See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised “emission activity category” form, including the results of

the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121, except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

a. [40 CFR 63.119(c)(1)]
The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [See sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL
The secondary seal shall meet the additional requirements specified below:

   a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.160(b)(4) [See section A.III].

   b. There shall be no holes, tears, or other openings in the seal or seal fabric.

## III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

   a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

   b. the types of petroleum liquids stored in the tank;

   c. the annual throughput of any petroleum liquid stored in the tank; and

   d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

   a. [40 CFR 63.646(b)(1)]
   The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

   b. [40 CFR 63.646(b)(2)]
   When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage

vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(d) (for EFR tanks)]
The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III].

c. [40 CFR 63.123(g)]
When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III.], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

a. [40 CFR 63.120(b)(1)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

i. [40 CFR 63.120(b)(1)(i)]
Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

ii. [40 CFR 63.120(b)(1)(iii)]

Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

iii. [40 CFR 63.120(b)(1)(iv)]
If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III.], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27 centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]

When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [See section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [See sections A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

   b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]

If the inspection required by 40 CFR 63.120(b)(10) [See section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [See section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T034 is a 148,297.5 barrel petroleum liquid storage tank identified as PR-500817. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z)<br><br>40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.a through A.I.2.e.<br><br>See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised “emission activity category” form, including the results of

the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121, except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

a. [40 CFR 63.119(c)(1)]
The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [See sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL
The secondary seal shall meet the additional requirements specified below:

   a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.160(b)(4) [See section A.III].

   b. There shall be no holes, tears, or other openings in the seal or seal fabric.

## III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

   a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

   b. the types of petroleum liquids stored in the tank;

   c. the annual throughput of any petroleum liquid stored in the tank; and

   d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

   a. [40 CFR 63.646(b)(1)]
   The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

   b. [40 CFR 63.646(b)(2)]
   When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage

vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(d) (for EFR tanks)]
The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III].

c. [40 CFR 63.123(g)]
When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III.], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

a. [40 CFR 63.120(b)(1)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

i. [40 CFR 63.120(b)(1)(i)]
Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

ii. [40 CFR 63.120(b)(1)(iii)]

Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

iii. [40 CFR 63.120(b)(1)(iv)]
If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III.], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27 centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]

When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [See section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [See sections A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

   b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]

If the inspection required by 40 CFR 63.120(b)(10) [See section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [See section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T035 is a 42,211.44 barrel petroleum liquid storage tank identified as PR-500143. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z)<br><br>40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.a through A.I.2.e.<br><br>See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised “emission activity category” form, including the results of

the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121, except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

a. [40 CFR 63.119(c)(1)]
The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [See sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL
The secondary seal shall meet the additional requirements specified below:

   a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.160(b)(4) [See section A.III].

   b. There shall be no holes, tears, or other openings in the seal or seal fabric.

## III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

   a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

   b. the types of petroleum liquids stored in the tank;

   c. the annual throughput of any petroleum liquid stored in the tank; and

   d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

   a. [40 CFR 63.646(b)(1)]
   The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

   b. [40 CFR 63.646(b)(2)]
   When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage

vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(d) (for EFR tanks)]
The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III].

c. [40 CFR 63.123(g)]
When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III.], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

a. [40 CFR 63.120(b)(1)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

i. [40 CFR 63.120(b)(1)(i)]
Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

ii. [40 CFR 63.120(b)(1)(iii)]

Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

iii. [40 CFR 63.120(b)(1)(iv)]
If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III.], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27 centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]

When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [See section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [See sections A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

   b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]

If the inspection required by 40 CFR 63.120(b)(10) [See section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [See section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T036 is a 42,211.35 barrel petroleum liquid storage tank identified as PR-500123. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z)<br><br>40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.a through A.I.2.e.<br><br>See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised “emission activity category” form, including the results of

the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121, except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

a. [40 CFR 63.119(c)(1)]
The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [See sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL
The secondary seal shall meet the additional requirements specified below:

   a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.160(b)(4) [See section A.III].

   b. There shall be no holes, tears, or other openings in the seal or seal fabric.

## III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

   a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

   b. the types of petroleum liquids stored in the tank;

   c. the annual throughput of any petroleum liquid stored in the tank; and

   d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

   a. [40 CFR 63.646(b)(1)]
   The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

   b. [40 CFR 63.646(b)(2)]
   When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage

vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(d) (for EFR tanks)]
The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III].

c. [40 CFR 63.123(g)]
When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III.], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

a. [40 CFR 63.120(b)(1)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

i. [40 CFR 63.120(b)(1)(i)]
Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

ii. [40 CFR 63.120(b)(1)(iii)]

Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

iii. [40 CFR 63.120(b)(1)(iv)]
If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III.], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27 centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]

When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [See section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [See sections A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

   b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]

If the inspection required by 40 CFR 63.120(b)(10) [See section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [See section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T037 is a 41,782.97 barrel petroleum liquid storage tank identified as PR-500122. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z)<br><br>40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.a through A.I.2.e.<br><br>See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised “emission activity category” form, including the results of

the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121, except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

a. [40 CFR 63.119(c)(1)]
The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [See sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL
The secondary seal shall meet the additional requirements specified below:

   a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.160(b)(4) [See section A.III].

   b. There shall be no holes, tears, or other openings in the seal or seal fabric.

## III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

   a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

   b. the types of petroleum liquids stored in the tank;

   c. the annual throughput of any petroleum liquid stored in the tank; and

   d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

   a. [40 CFR 63.646(b)(1)]
   The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

   b. [40 CFR 63.646(b)(2)]
   When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage

vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(d) (for EFR tanks)]
The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III].

c. [40 CFR 63.123(g)]
When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III.], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

a. [40 CFR 63.120(b)(1)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

i. [40 CFR 63.120(b)(1)(i)]
Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

ii. [40 CFR 63.120(b)(1)(iii)]

Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

iii. [40 CFR 63.120(b)(1)(iv)]
If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III.], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27 centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]

When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [See section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [See sections A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

   b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]

If the inspection required by 40 CFR 63.120(b)(10) [See section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [See section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T038 is a 41,770.82 barrel petroleum liquid storage tank identified as PR-500120. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z)<br><br>40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.a through A.I.2.e.<br><br>See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised “emission activity category” form, including the results of

the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121, except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

a. [40 CFR 63.119(c)(1)]
The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [See sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL
The secondary seal shall meet the additional requirements specified below:

   a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.160(b)(4) [See section A.III].

   b. There shall be no holes, tears, or other openings in the seal or seal fabric.

## III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

   a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

   b. the types of petroleum liquids stored in the tank;

   c. the annual throughput of any petroleum liquid stored in the tank; and

   d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

   a. [40 CFR 63.646(b)(1)]
   The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

   b. [40 CFR 63.646(b)(2)]
   When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage

vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(d) (for EFR tanks)]
The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III].

c. [40 CFR 63.123(g)]
When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III.], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

a. [40 CFR 63.120(b)(1)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

i. [40 CFR 63.120(b)(1)(i)]
Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

ii. [40 CFR 63.120(b)(1)(iii)]

Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

iii. [40 CFR 63.120(b)(1)(iv)]
If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III.], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27 centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]

When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [See section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [See sections A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

   b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]

If the inspection required by 40 CFR 63.120(b)(10) [See section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [See section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T039 is a 41,965.73 barrel petroleum liquid storage tank identified as PR-500121. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z)<br><br>40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.a through A.I.2.e.<br><br>See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised “emission activity category” form, including the results of

the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121, except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

a. [40 CFR 63.119(c)(1)]
The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [See sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL
The secondary seal shall meet the additional requirements specified below:

   a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.160(b)(4) [See section A.III].

   b. There shall be no holes, tears, or other openings in the seal or seal fabric.

## III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

   a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

   b. the types of petroleum liquids stored in the tank;

   c. the annual throughput of any petroleum liquid stored in the tank; and

   d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

   a. [40 CFR 63.646(b)(1)]
   The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

   b. [40 CFR 63.646(b)(2)]
   When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage

vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(d) (for EFR tanks)]
The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III].

c. [40 CFR 63.123(g)]
When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III.], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

a. [40 CFR 63.120(b)(1)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

i. [40 CFR 63.120(b)(1)(i)]
Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

ii. [40 CFR 63.120(b)(1)(iii)]

Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

iii. [40 CFR 63.120(b)(1)(iv)]
If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III.], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27 centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]

When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [See section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [See sections A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

   b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]

If the inspection required by 40 CFR 63.120(b)(10) [See section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [See section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T040 is a 44,404.5 barrel petroleum liquid storage tank identified as PR-500131. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z)<br><br>40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.a through A.I.2.e.<br><br>See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised “emission activity category” form, including the results of

the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121, except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

a. [40 CFR 63.119(c)(1)]
The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [See sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL
The secondary seal shall meet the additional requirements specified below:

   a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.160(b)(4) [See section A.III].

   b. There shall be no holes, tears, or other openings in the seal or seal fabric.

## III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

   a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

   b. the types of petroleum liquids stored in the tank;

   c. the annual throughput of any petroleum liquid stored in the tank; and

   d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

   a. [40 CFR 63.646(b)(1)]
   The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

   b. [40 CFR 63.646(b)(2)]
   When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage

vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(d) (for EFR tanks)]
The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III].

c. [40 CFR 63.123(g)]
When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III.], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

a. [40 CFR 63.120(b)(1)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

i. [40 CFR 63.120(b)(1)(i)]
Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

ii. [40 CFR 63.120(b)(1)(iii)]

Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

iii. [40 CFR 63.120(b)(1)(iv)]
If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III.], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27 centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]

When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [See section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [See sections A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

   b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]

If the inspection required by 40 CFR 63.120(b)(10) [See section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [See section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T041 is a 42,614.05 barrel petroleum liquid storage tank identified as PR-500130. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z)<br><br>40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.a through A.I.2.e.<br><br>See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised “emission activity category” form, including the results of

the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121, except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

a. [40 CFR 63.119(c)(1)]
The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [See sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL
The secondary seal shall meet the additional requirements specified below:

   a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.160(b)(4) [See section A.III].

   b. There shall be no holes, tears, or other openings in the seal or seal fabric.

## III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

   a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

   b. the types of petroleum liquids stored in the tank;

   c. the annual throughput of any petroleum liquid stored in the tank; and

   d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

   a. [40 CFR 63.646(b)(1)]
   The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

   b. [40 CFR 63.646(b)(2)]
   When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage

vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(d) (for EFR tanks)]
The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III].

c. [40 CFR 63.123(g)]
When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III.], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

a. [40 CFR 63.120(b)(1)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

i. [40 CFR 63.120(b)(1)(i)]
Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

ii. [40 CFR 63.120(b)(1)(iii)]

Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

iii. [40 CFR 63.120(b)(1)(iv)]
If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III.], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27 centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]

When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [See section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [See sections A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

   b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]

If the inspection required by 40 CFR 63.120(b)(10) [See section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [See section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T044 is a 131,660 barrel petroleum liquid storage tank identified as PR-500158. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z)<br><br>40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.a through A.I.2.e.<br><br>See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised “emission activity category” form, including the results of

the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121, except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

a. [40 CFR 63.119(c)(1)]
The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [See sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL
The secondary seal shall meet the additional requirements specified below:

   a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.160(b)(4) [See section A.III].

   b. There shall be no holes, tears, or other openings in the seal or seal fabric.

## III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

   a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

   b. the types of petroleum liquids stored in the tank;

   c. the annual throughput of any petroleum liquid stored in the tank; and

   d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

   a. [40 CFR 63.646(b)(1)]
   The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

   b. [40 CFR 63.646(b)(2)]
   When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage

vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(d) (for EFR tanks)]
The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III].

c. [40 CFR 63.123(g)]
When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III.], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

a. [40 CFR 63.120(b)(1)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

i. [40 CFR 63.120(b)(1)(i)]
Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

ii. [40 CFR 63.120(b)(1)(iii)]

Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

iii. [40 CFR 63.120(b)(1)(iv)]
If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III.], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27 centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]

When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [See section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [See sections A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

   b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]

If the inspection required by 40 CFR 63.120(b)(10) [See section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [See section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T045 is a 35,589.28 barrel storage tank identified as PR-500776. The tank has an internal floating roof with dual seals. It is currently operated as a Group 1 storage vessel under 40 CFR Part 63, Subpart CC. | 40 CFR Part 63, Subpart CC | See sections A.I.2.g through A.I.2.j. |
| | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | OAC rule 3745-31-05(A)(3) (PTI 04-029) | See sections A.I.2.c through A.I.2.f. |
| | 40 CFR Part 60, Subpart K | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a As specified under 40 CFR 63.640(n)(5), a Group 1 storage vessel that is also subject to the provisions of 40 CFR Part 60, Subpart K is required to only comply with the provisions of 40 CFR Part 63, Subpart CC.

2.b The requirements specified by this rule are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3).

2.c The requirements of this rule also include compliance with 40 CFR Part 60, Subpart K.

2.d The fixed roof storage tank shall be equipped with an internal floating roof.

2.e The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

2.f All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

2.g Each permittee of a Group 1 storage vessel subject to 40 CFR Part 63, Subpart CC shall comply with the requirements of 40 CFR 63.119 through 63.121 (Subpart G) except as provided in 63.646(b) through 63.646(l) of Subpart CC.

2.h Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

2.i The permittee shall comply with the requirements specified in 40 CFR 63.119(b)(1), (2) and (3) [See section A.II.].

2.j To demonstrate compliance with 40 CFR 63.119(b) of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements of 63.120(a) of Subpart G [See section A.III.].

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply to Group 1 storage vessels at existing sources:

a. If a cover or lid is installed on an opening on a floating roof, the cover or lid shall remain closed except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

2. [40 CFR 63.119(b)]
[Note: The intent of 40 CFR 63.119(b)(1) and (b)(2) of Subpart G is to avoid having a vapor space between the floating roof and the stored liquid for extended periods. Storage vessels may be emptied for purposes such as routine storage vessel maintenance, inspections, petroleum liquid deliveries, or transfer operations. Storage vessels where liquid is left on walls, as bottom clingage, or in pools due to floor irregularity are considered completely empty.]

a. [40 CFR 63.119(b)(1)]
The internal floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

b. [40 CFR 63.119(b)(2)]

When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

c. [40 CFR 63.119(b)(3)]
Each internal floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. Except as provided in paragraph iv. of this section, the closure device shall consist of one of the devices listed in paragraphs i., ii., or iii. of this section.

i. A liquid-mounted seal as defined in 40 CFR 63.111.

ii. A metallic shoe seal as defined in 40 CFR 63.111.

iii. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor- mounted, but both must be continuous seals.

iv. If the internal floating roof is equipped with a vapor-mounted seal as of July 15, 1994, the requirement for one of the seal options specified in paragraphs i., ii., and iii. of this section does not apply until the earlier of the dates: the next time the storage vessel is emptied and degassed or no later than 10 years after August 18, 1995.

## III. Monitoring and/or Record Keeping Requirements

1. [OAC 3745-21-09(L)]
The permittee shall maintain records of the following information:

a. the types of petroleum liquids stored in the tank; and

b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

2. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

3. [40 CFR 63.646(b)]
As used in 40 CFR Part 63, Subpart CC, all terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 40 CFR 63.119 of Subpart G.

a. [40 CFR 63.646(b)(1)]
The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

b. [40 CFR 63.646(b)(2)]
When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

4. [6 40 CFR 3.120(a)] INSPECTIONS
To demonstrate compliance with 40 CFR 63.119(b) [See section A.I.2.f.] of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements in the paragraphs a., b. and c. of this section.

a. [40 CFR 63.120(a)(1)]
The permittee shall visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), according to the schedule specified in 63.120(a)(3), see paragraph b. of this section.

b. [40 CFR 63.120(a)(3); (a)(3)(i) - (a)(3)(iii)]
For vessels equipped with a double-seal system, the permittee shall perform either the inspection required by paragraph i. of this section or the inspections required by both paragraphs ii. and iii. of this section.

i. Visually inspect the internal floating roof , the primary seal, and secondary seal each time the storage vessel is emptied and degassed and at least once every 5 years after the first degassing and cleaning activity after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

ii. The permittee shall visually inspect the internal floating roof and the secondary seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill, or at least once every 12 months after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

iii. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal each time the vessel is emptied and degassed and at least once every 10 years after the first degassing and cleaning activity after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

[Note: The permittee is not required to comply with the provisions for gaskets, slotted membranes and sleeve seals in 40 CFR 63.120(a)(3). This exemption is found under 40 CFR 63.646(e).]

c. [40 CFR 63.120(a)(4)]

If during the inspections required by b.ii of this section, the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached; or there are holes or tears in the seal fabric; or there are visible gaps between the seal and the wall of the storage vessel, the permittee shall repair the items or empty and remove the storage vessel from service within 45 calendar days. If a failure that is detected during inspections required by paragraph b.ii of this section cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

d. [40 CFR 63.120(a)(7)]
If during the inspections required by 40 CFR 63.120(a)(3)(i) or (a)(3)(iii) [See paragraph b. of this section.], the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with organic HAP.

5. [40 CFR 63.646(e)]
When complying with the inspection requirements of 40 CFR 63.120 of Subpart G, the permittees of storage vessels at existing sources subject to 40 CFR Part 63, Subpart CC, are not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(c)]
The permittee shall keep a record that each inspection required by 40 CFR 63.120(a) [See section A.III.] was performed.

c. [40 CFR 63.123(g)]
The permittee who elects to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(a)(4) [See section A.III.] shall keep in a readily accessible location, the documentation specified in 63.120(a)(4) [See section A.III.] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

## IV. Reporting Requirements

1. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

2. [40 CFR 63.646(l)]
The State or local permitting authority can waive the notification requirements of 40 CFR 63.120(a)(5), 63.120(a)(6), 63.120(b)(10)(ii), and 63.120(b)(10)(iii) for all or some storage vessels at petroleum refineries subject to this subpart. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notifications in 40 CFR 63.120(a)(6) or 63.120(b)(10)(iii) for all storage vessels at a refinery or for individual storage vessels on a case-by-case basis.

3. [40 CFR 63.654(g)]
The permittee shall submit Periodic Reports no later than 60 days after the end of each 6-month period when any of the compliance exceptions specified in paragraphs a. and b. below, occur. The first 6-month period shall begin on the date the Notification of Compliance Status report is required to be submitted. (Existing Group 1 storage vessels shall be in compliance at the first degassing and cleaning activity after August 18, 1998, or by August 18, 2005, whichever is first [40 CFR 63.640(h)(4)]). A Periodic Report is not required if none of the compliance exceptions specified in paragraphs a. and b. occurred during the 6-month period unless emissions averaging is utilized. The permittee may submit reports required by other regulations in place of or as part of the Periodic Report required by this paragraph if the reports contain the information required by paragraphs a. and b. below.

a. [40 CFR 63.654(g)(1)]
For storage vessels, Periodic Reports shall include the information specified for Periodic Reports in paragraph b., except that information related to gaskets, slotted membranes, and sleeve seals is not required for storage vessels that are part of an existing source.

b. [40 CFR 63.654(g)(2) and (2)(i)(A) through (2)(i)(C)]

The permittee shall submit the results of each inspection conducted in accordance with 40 CFR 63.120(a) of Subpart G [See section A.III.] in which a failure is detected in the control equipment. For vessels for which annual inspections are required under 63.120(a)(3)(ii) [See section A.III.], the specifications and requirements listed in paragraphs i. through iii. of this section apply.

i. A failure is defined as any time in which the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached from the internal floating roof; or there are holes, and date the repair was made or the date the storage vessel was emptied.

ii. Except as provided in paragraph iii. of this section, each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made or the date the storage vessel was emptied.

iii. If an extension is utilized in accordance with 40 CFR 63.120(a)(4) of Subpart G, [See section A.III.], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 63.120(a)(4) of Subpart G, [See section A.III.]; and describe the date the storage vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(2)(ii) and (2)(ii)(A) through (2)(ii)(B)]
For vessels for which inspections are required under 40 CFR 63.120(a)(3)(i) or (a)(3)(iii) [See section A.III.] (i.e., internal inspections), the specifications and requirements listed in paragraphs i. through ii. of this section apply.

i. A failure is defined as any time in which the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal (if one has been installed) has holes, tears, or other openings in the seal or the seal fabric.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

4. [40 CFR 63.654(h)(2) and (h)(2)(i)]
Reports shall be submitted as specified in Subpart A of 40 CFR Part 63 and for storage vessels, notifications of inspections as specified in the following paragraphs, a. through c. In order to afford the Administrator the opportunity to have an observer present, the permittee shall notify the Administrator of the refilling of each Group 1 storage vessel that has been emptied and degassed.

a. [40 CFR 63.654(h)(2)(i)(A)]

Except as provided in paragraphs b. and c. of this section, the permittee shall notify the Administrator in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP's to afford the Administrator the opportunity to inspect the storage vessel prior to refilling.

b. [40 CFR 63.654(h)(2)(i)(B)]
Except as provided in paragraph c. of this section, if the internal inspection required by 40 CFR 63.120(a)(3), is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP's, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. This notification, including the written documentation, may also be made in writing and sent so that it is received by the Administrator at least 7 calendar days prior to the refilling.

c. [40 CFR 63.654(h)(2)(i)(C)]
The State or local permitting authority can waive the notification requirements of paragraph a. and/or b. of this section for all or some storage vessels at petroleum refineries subject to 40 CFR Part 63, Subpart CC. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph a. of this section or sooner than 7 days after submitting the notification required by paragraph b. of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T046 is a 34,520.7 barrel storage tank identified as PR-500777. The tank has an internal floating roof with dual seals. It is currently operated as a Group 1 storage vessel under 40 CFR Part 63, Subpart CC. | 40 CFR Part 63, Subpart CC | See sections A.I.2.g through A.I.2.j. |
| | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | OAC rule 3745-31-05(A)(3) (PTI 04-029) | See sections A.I.2.c through A.I.2.f. |
| | 40 CFR Part 60, Subpart K | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a As specified under 40 CFR 63.640(n)(5), a Group 1 storage vessel that is also subject to the provisions of 40 CFR Part 60, Subpart K is required to only comply with the provisions of 40 CFR Part 63, Subpart CC.

2.b The requirements specified by this rule are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3).

2.c The requirements of this rule also include compliance with 40 CFR Part 60, Subpart K.

2.d The fixed roof storage tank shall be equipped with an internal floating roof.

2.e The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

2.f All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

2.g Each permittee of a Group 1 storage vessel subject to 40 CFR Part 63, Subpart CC shall comply with the requirements of 40 CFR 63.119 through 63.121 (Subpart G) except as provided in 63.646(b) through 63.646(l) of Subpart CC.

2.h Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

2.i The permittee shall comply with the requirements specified in 40 CFR 63.119(b)(1), (2) and (3) [See section A.II.].

2.j To demonstrate compliance with 40 CFR 63.119(b) of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements of 63.120(a) of Subpart G [See section A.III.].

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply to Group 1 storage vessels at existing sources:

a. If a cover or lid is installed on an opening on a floating roof, the cover or lid shall remain closed except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

2. [40 CFR 63.119(b)]
[Note: The intent of 40 CFR 63.119(b)(1) and (b)(2) of Subpart G is to avoid having a vapor space between the floating roof and the stored liquid for extended periods. Storage vessels may be emptied for purposes such as routine storage vessel maintenance, inspections, petroleum liquid deliveries, or transfer operations. Storage vessels where liquid is left on walls, as bottom clingage, or in pools due to floor irregularity are considered completely empty.]

a. [40 CFR 63.119(b)(1)]
The internal floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

b. [40 CFR 63.119(b)(2)]

When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

c. [40 CFR 63.119(b)(3)]
Each internal floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. Except as provided in paragraph iv. of this section, the closure device shall consist of one of the devices listed in paragraphs i., ii., or iii. of this section.

i. A liquid-mounted seal as defined in 40 CFR 63.111.

ii. A metallic shoe seal as defined in 40 CFR 63.111.

iii. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor- mounted, but both must be continuous seals.

iv. If the internal floating roof is equipped with a vapor-mounted seal as of July 15, 1994, the requirement for one of the seal options specified in paragraphs i., ii., and iii. of this section does not apply until the earlier of the dates: the next time the storage vessel is emptied and degassed or no later than 10 years after August 18, 1995.

## III. Monitoring and/or Record Keeping Requirements

1. [OAC 3745-21-09(L)]
The permittee shall maintain records of the following information:

a. the types of petroleum liquids stored in the tank; and

b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

2. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

3. [40 CFR 63.646(b)]
As used in 40 CFR Part 63, Subpart CC, all terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 40 CFR 63.119 of Subpart G.

a. [40 CFR 63.646(b)(1)]
The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

b. [40 CFR 63.646(b)(2)]
When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

4. [6 40 CFR 3.120(a)] INSPECTIONS
To demonstrate compliance with 40 CFR 63.119(b) [See section A.I.2.f.] of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements in the paragraphs a., b. and c. of this section.

a. [40 CFR 63.120(a)(1)]
The permittee shall visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), according to the schedule specified in 63.120(a)(3), see paragraph b. of this section.

b. [40 CFR 63.120(a)(3); (a)(3)(i) - (a)(3)(iii)]
For vessels equipped with a double-seal system, the permittee shall perform either the inspection required by paragraph i. of this section or the inspections required by both paragraphs ii. and iii. of this section.

i. Visually inspect the internal floating roof , the primary seal, and secondary seal each time the storage vessel is emptied and degassed and at least once every 5 years after the first degassing and cleaning activity after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

ii. The permittee shall visually inspect the internal floating roof and the secondary seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill, or at least once every 12 months after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

iii. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal each time the vessel is emptied and degassed and at least once every 10 years after the first degassing and cleaning activity after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

[Note: The permittee is not required to comply with the provisions for gaskets, slotted membranes and sleeve seals in 40 CFR 63.120(a)(3). This exemption is found under 40 CFR 63.646(e).]

c. [40 CFR 63.120(a)(4)]

If during the inspections required by b.ii of this section, the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached; or there are holes or tears in the seal fabric; or there are visible gaps between the seal and the wall of the storage vessel, the permittee shall repair the items or empty and remove the storage vessel from service within 45 calendar days. If a failure that is detected during inspections required by paragraph b.ii of this section cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

d. [40 CFR 63.120(a)(7)]
If during the inspections required by 40 CFR 63.120(a)(3)(i) or (a)(3)(iii) [See paragraph b. of this section.], the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with organic HAP.

5. [40 CFR 63.646(e)]
When complying with the inspection requirements of 40 CFR 63.120 of Subpart G, the permittees of storage vessels at existing sources subject to 40 CFR Part 63, Subpart CC, are not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(c)]
The permittee shall keep a record that each inspection required by 40 CFR 63.120(a) [See section A.III.] was performed.

c. [40 CFR 63.123(g)]
The permittee who elects to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(a)(4) [See section A.III.] shall keep in a readily accessible location, the documentation specified in 63.120(a)(4) [See section A.III.] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

## IV. Reporting Requirements

1. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

2. [40 CFR 63.646(l)]
The State or local permitting authority can waive the notification requirements of 40 CFR 63.120(a)(5), 63.120(a)(6), 63.120(b)(10)(ii), and 63.120(b)(10)(iii) for all or some storage vessels at petroleum refineries subject to this subpart. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notifications in 40 CFR 63.120(a)(6) or 63.120(b)(10)(iii) for all storage vessels at a refinery or for individual storage vessels on a case-by-case basis.

3. [40 CFR 63.654(g)]
The permittee shall submit Periodic Reports no later than 60 days after the end of each 6-month period when any of the compliance exceptions specified in paragraphs a. and b. below, occur. The first 6-month period shall begin on the date the Notification of Compliance Status report is required to be submitted. (Existing Group 1 storage vessels shall be in compliance at the first degassing and cleaning activity after August 18, 1998, or by August 18, 2005, whichever is first [40 CFR 63.640(h)(4)]). A Periodic Report is not required if none of the compliance exceptions specified in paragraphs a. and b. occurred during the 6-month period unless emissions averaging is utilized. The permittee may submit reports required by other regulations in place of or as part of the Periodic Report required by this paragraph if the reports contain the information required by paragraphs a. and b. below.

a. [40 CFR 63.654(g)(1)]
For storage vessels, Periodic Reports shall include the information specified for Periodic Reports in paragraph b., except that information related to gaskets, slotted membranes, and sleeve seals is not required for storage vessels that are part of an existing source.

b. [40 CFR 63.654(g)(2) and (2)(i)(A) through (2)(i)(C)]

The permittee shall submit the results of each inspection conducted in accordance with 40 CFR 63.120(a) of Subpart G [See section A.III.] in which a failure is detected in the control equipment. For vessels for which annual inspections are required under 63.120(a)(3)(ii) [See section A.III.], the specifications and requirements listed in paragraphs i. through iii. of this section apply.

i. A failure is defined as any time in which the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached from the internal floating roof; or there are holes, and date the repair was made or the date the storage vessel was emptied.

ii. Except as provided in paragraph iii. of this section, each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made or the date the storage vessel was emptied.

iii. If an extension is utilized in accordance with 40 CFR 63.120(a)(4) of Subpart G, [See section A.III.], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 63.120(a)(4) of Subpart G, [See section A.III.]; and describe the date the storage vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(2)(ii) and (2)(ii)(A) through (2)(ii)(B)]
For vessels for which inspections are required under 40 CFR 63.120(a)(3)(i) or (a)(3)(iii) [See section A.III.] (i.e., internal inspections), the specifications and requirements listed in paragraphs i. through ii. of this section apply.

i. A failure is defined as any time in which the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal (if one has been installed) has holes, tears, or other openings in the seal or the seal fabric.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

4. [40 CFR 63.654(h)(2) and (h)(2)(i)]
Reports shall be submitted as specified in Subpart A of 40 CFR Part 63 and for storage vessels, notifications of inspections as specified in the following paragraphs, a. through c. In order to afford the Administrator the opportunity to have an observer present, the permittee shall notify the Administrator of the refilling of each Group 1 storage vessel that has been emptied and degassed.

a. [40 CFR 63.654(h)(2)(i)(A)]

Except as provided in paragraphs b. and c. of this section, the permittee shall notify the Administrator in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP's to afford the Administrator the opportunity to inspect the storage vessel prior to refilling.

b. [40 CFR 63.654(h)(2)(i)(B)]
Except as provided in paragraph c. of this section, if the internal inspection required by 40 CFR 63.120(a)(3), is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP's, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. This notification, including the written documentation, may also be made in writing and sent so that it is received by the Administrator at least 7 calendar days prior to the refilling.

c. [40 CFR 63.654(h)(2)(i)(C)]
The State or local permitting authority can waive the notification requirements of paragraph a. and/or b. of this section for all or some storage vessels at petroleum refineries subject to 40 CFR Part 63, Subpart CC. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph a. of this section or sooner than 7 days after submitting the notification required by paragraph b. of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

Emissions Unit ID: **T047**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T047 is a 150,609.09 barrel fixed roof storage vessel identified as tank number PR-500216. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | OAC rule 3745-31-05(A)(3) (PTI 04-112 issued April 24, 1978) | See section A.I.2.d. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |
| | 40 CFR Part 60, Subpart Ka | See section A.I.2.c. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

2.c As specified under 40 CFR 63.640(n)(7), a Group 2 storage vessel that is subject to the provisions of 40 CFR Part 60, Subpart Ka, but not to the control requirements of Subpart Ka, is required to only comply with the provisions of 40 CFR Part 63, Subpart CC.

2.d The requirements established pursuant to this rule are less stringent than the requirements specified in 40 CFR Part 63, Subpart CC.

## II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

2. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T051 is a 1,480 barrel storage tank identified as PR-500697. The tank has an internal floating roof with dual seals. It is currently operated as a Group 1 storage vessel under 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(L) | See sections A.I.2.a through A.I.2.c. |
| | 40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.d through A.I.2.g and A.II.1. |

**2. Additional Terms and Conditions**

2.a The fixed roof storage tank shall be equipped with an internal floating roof.

2.b The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

2.c All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

2.d. Each permittee of a Group 1 storage vessel subject to 40 CFR Part 63, Subpart CC shall comply with the requirements of 40 CFR 63.119 through 63.121 (Subpart G) except as provided in 63.646(b) through 63.646(l) of Subpart CC.

2.e. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

2.f. The permittee who uses a fixed roof and an internal floating roof shall comply with the requirements specified in 40 CFR 63.119(b)(1), (2) and (3) [See section A.II.].

2.g. To demonstrate compliance with 40 CFR 63.119(b) of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements of 63.120(a) of Subpart G [See section A.III.].

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply to Group 1 storage vessels at existing sources:

a. If a cover or lid is installed on an opening on a floating roof, the cover or lid shall remain closed except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

2. [40 CFR 63.119(b)]
[Note: The intent of 40 CFR 63.119(b)(1) and (b)(2) of Subpart G is to avoid having a vapor space between the floating roof and the stored liquid for extended periods. Storage vessels may be emptied for purposes such as routine storage vessel maintenance, inspections, petroleum liquid deliveries, or transfer operations. Storage vessels where liquid is left on walls, as bottom clingage, or in pools due to floor irregularity are considered completely empty.]

a. [40 CFR 63.119(b)(1)]
The internal floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

b. [40 CFR 63.119(b)(2)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

c. [40 CFR 63.119(b)(3)]
Each internal floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. Except as provided in paragraph iv. of this section, the closure device shall consist of one of the devices listed in paragraphs i., ii., or iii. of this section.

i. A liquid-mounted seal as defined in 40 CFR 63.111.

ii. A metallic shoe seal as defined in 40 CFR 63.111.

iii. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor- mounted, but both must be continuous seals.

iv. If the internal floating roof is equipped with a vapor-mounted seal as of July 15, 1994, the requirement for one of the seal options specified in paragraphs i., ii., and iii. of this section does not apply until the earlier of the dates: the next time the storage vessel is emptied and degassed or no later than 10 years after August 18, 1995.

## III. Monitoring and/or Record Keeping Requirements

1. [OAC 3745-21-09(L)]
The permittee shall maintain records of the following information:

a. the types of petroleum liquids stored in the tank; and

b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

2. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

3. [40 CFR 63.646(b)]
As used in 40 CFR Part 63, Subpart CC, all terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 40 CFR 63.119 of Subpart G.

a. [40 CFR 63.646(b)(1)]
The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

b. [40 CFR 63.646(b)(2)]
When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage

vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

4. [6 40 CFR 3.120(a)] INSPECTIONS
To demonstrate compliance with 40 CFR 63.119(b) [See section A.I.2.f.] of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements in the paragraphs a., b. and c. of this section.

a. [40 CFR 63.120(a)(1)]
The permittee shall visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), according to the schedule specified in 63.120(a)(3), see paragraph b. of this section.

b. [40 CFR 63.120(a)(3); (a)(3)(i) - (a)(3)(iii)]
For vessels equipped with a double-seal system, the permittee shall perform either the inspection required by paragraph i. of this section or the inspections required by both paragraphs ii. and iii. of this section.

i. Visually inspect the internal floating roof , the primary seal, and secondary seal each time the storage vessel is emptied and degassed and at least once every 5 years after the first degassing and cleaning activity after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

ii. The permittee shall visually inspect the internal floating roof and the secondary seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill, or at least once every 12 months after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

iii. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal each time the vessel is emptied and degassed and at least once every 10 years after the first degassing and cleaning activity after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

[Note: The permittee is not required to comply with the provisions for gaskets, slotted membranes and sleeve seals in 40 CFR 63.120(a)(3). This exemption is found under 40 CFR 63.646(e).]

c. [40 CFR 63.120(a)(4)]
If during the inspections required by b.ii of this section, the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached; or there are holes or tears in the seal fabric; or there are visible gaps between the seal and the wall of the storage vessel, the permittee shall repair the items or empty and remove the storage vessel from service within 45 calendar days. If a failure that is detected during inspections required by paragraph b.ii of this section cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to

utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

d. [40 CFR 63.120(a)(7)]
If during the inspections required by 40 CFR 63.120(a)(3)(i) or (a)(3)(iii) [See paragraph b. of this section.], the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with organic HAP.

5. [40 CFR 63.646(e)]
When complying with the inspection requirements of 40 CFR 63.120 of Subpart G, the permittees of storage vessels at existing sources subject to 40 CFR Part 63, Subpart CC, are not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(c)]
The permittee shall keep a record that each inspection required by 40 CFR 63.120(a) [See section A.III.] was performed.

c. [40 CFR 63.123(g)]
The permittee who elects to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(a)(4) [See section A.III.] shall keep in a readily accessible location, the documentation specified in 63.120(a)(4) [See section A.III.] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

## IV. Reporting Requirements

1. [40 CFR 63.642(f)]

All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator of USEPA and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

| | |
|---|---|
| EPA Region V<br>Director<br>Air and Radiation Division<br>77 West Jackson Boulevard<br>Chicago, Illinois 60604-3507 | Toledo Division of Environmental Services<br>Air Section<br>348 South Erie Street<br>Toledo, Ohio 43602-1633 |

2. [40 CFR 63.646(l)]
The State or local permitting authority can waive the notification requirements of 40 CFR 63.120(a)(5), 63.120(a)(6), 63.120(b)(10)(ii), and 63.120(b)(10)(iii) for all or some storage vessels at petroleum refineries subject to this subpart. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notifications in 40 CFR 63.120(a)(6) or 63.120(b)(10)(iii) for all storage vessels at a refinery or for individual storage vessels on a case-by-case basis.

3. [40 CFR 63.654(g)]
The permittee shall submit Periodic Reports no later than 60 days after the end of each 6-month period when any of the compliance exceptions specified in paragraphs a. and b. below, occur. The first 6-month period shall begin on the date the Notification of Compliance Status report is required to be submitted. (Existing Group 1 storage vessels shall be in compliance at the first degassing and cleaning activity after August 18, 1998, or by August 18, 2005, whichever is first [40 CFR 63.640(h)(4)]). A Periodic Report is not required if none of the compliance exceptions specified in paragraphs a. and b. occurred during the 6-month period unless emissions averaging is utilized. The permittee may submit reports required by other regulations in place of or as part of the Periodic Report required by this paragraph if the reports contain the information required by paragraphs a. and b. below.

a. [40 CFR 63.654(g)(1)]
For storage vessels, Periodic Reports shall include the information specified for Periodic Reports in paragraph b., except that information related to gaskets, slotted membranes, and sleeve seals is not required for storage vessels that are part of an existing source.

b. [40 CFR 63.654(g)(2) and (2)(i)(A) through (2)(i)(C)]
The permittee shall submit the results of each inspection conducted in accordance with 40 CFR 63.120(a) of Subpart G [See section A.III.] in which a failure is detected in the control equipment. For vessels for which annual inspections are required under 63.120(a)(3)(ii) [See section A.III.], the specifications and requirements listed in paragraphs i. through iii. of this section apply.

i. A failure is defined as any time in which the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached from the

internal floating roof; or there are holes, and date the repair was made or the date the storage vessel was emptied.

ii. Except as provided in paragraph iii. of this section, each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made or the date the storage vessel was emptied.

iii. If an extension is utilized in accordance with 40 CFR 63.120(a)(4) of Subpart G, [See section A.III.], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 63.120(a)(4) of Subpart G, [See section A.III.]; and describe the date the storage vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(2)(ii) and (2)(ii)(A) through (2)(ii)(B)]
For vessels for which inspections are required under 40 CFR 63.120(a)(3)(i) or (a)(3)(iii) [See section A.III.] (i.e., internal inspections), the specifications and requirements listed in paragraphs i. through ii. of this section apply.

i. A failure is defined as any time in which the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal (if one has been installed) has holes, tears, or other openings in the seal or the seal fabric.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

4. [40 CFR 63.654(h)(2) and (h)(2)(i)]
Reports shall be submitted as specified in Subpart A of 40 CFR Part 63 and for storage vessels, notifications of inspections as specified in the following paragraphs, a. through c. In order to afford the Administrator the opportunity to have an observer present, the permittee shall notify the Administrator of the refilling of each Group 1 storage vessel that has been emptied and degassed.

a. [40 CFR 63.654(h)(2)(i)(A)]
Except as provided in paragraphs b. and c. of this section, the permittee shall notify the Administrator in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP's to afford the Administrator the opportunity to inspect the storage vessel prior to refilling.

b. [40 CFR 63.654(h)(2)(i)(B)]
Except as provided in paragraph c. of this section, if the internal inspection required by 40 CFR 63.120(a)(3), is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP's, the

permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. This notification, including the written documentation, may also be made in writing and sent so that it is received by the Administrator at least 7 calendar days prior to the refilling.

c. [40 CFR 63.654(h)(2)(i)(C)]
The State or local permitting authority can waive the notification requirements of paragraph a. and/or b. of this section for all or some storage vessels at petroleum refineries subject to 40 CFR Part 63, Subpart CC. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph a. of this section or sooner than 7 days after submitting the notification required by paragraph b. of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

Emissions Unit ID: **T052**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T052 is a 6,714.72 barrel fixed roof storage vessel identified as tank number PR-500041. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

2. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **T053**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T053 is a 10,124.56 barrel fixed roof storage vessel identified as tank number PR-500048. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

3. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

4. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **T055**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T055 is a 10,491 barrel fixed roof storage vessel identified as tank number PR-500049. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

5. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

6. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **T056**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T056 is a 10,478.07 barrel fixed roof storage vessel identified as tank number PR-500055. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

7. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

8. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **T058**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T058 is a 10,491.43 barrel fixed roof storage vessel identified as tank number PR-500058. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

9. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

10. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T059 is a 41,665.08 barrel petroleum liquid storage tank identified as PR-500064. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z)<br><br>40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.a through A.I.2.e.<br><br>See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised "emission activity category" form, including the results of the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121, except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

a. [40 CFR 63.119(c)(1)]

The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [See sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL
The secondary seal shall meet the additional requirements specified below:

a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.160(b)(4) [See section A.III].

b. There shall be no holes, tears, or other openings in the seal or seal fabric.

## III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

b. the types of petroleum liquids stored in the tank;

c. the annual throughput of any petroleum liquid stored in the tank; and

d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

a. [40 CFR 63.646(b)(1)]
The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

b. [40 CFR 63.646(b)(2)]
When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(d) (for EFR tanks)]
The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III].

c. [40 CFR 63.123(g)]
When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III.], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

a. [40 CFR 63.120(b)(1)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

i. [40 CFR 63.120(b)(1)(i)]
Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

ii. [40 CFR 63.120(b)(1)(iii)]
Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

iii. [40 CFR 63.120(b)(1)(iv)]
If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III.], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27

centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the

conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]
When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [See section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [See sections A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days

prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]
If the inspection required by 40 CFR 63.120(b)(10) [See section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [See section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T060 is a 42,212.73 barrel petroleum liquid storage tank identified as PR-500065. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z)<br><br>40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.a through A.I.2.e.<br><br>See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised “emission activity category” form, including the results of

the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121, except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

a. [40 CFR 63.119(c)(1)]
The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [See sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL
The secondary seal shall meet the additional requirements specified below:

   a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.160(b)(4) [See section A.III].

   b. There shall be no holes, tears, or other openings in the seal or seal fabric.

## III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

   a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

   b. the types of petroleum liquids stored in the tank;

   c. the annual throughput of any petroleum liquid stored in the tank; and

   d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

   a. [40 CFR 63.646(b)(1)]
   The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

   b. [40 CFR 63.646(b)(2)]
   When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage

vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(d) (for EFR tanks)]
The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III].

c. [40 CFR 63.123(g)]
When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III.], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

a. [40 CFR 63.120(b)(1)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

i. [40 CFR 63.120(b)(1)(i)]
Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

ii. [40 CFR 63.120(b)(1)(iii)]

Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

iii. [40 CFR 63.120(b)(1)(iv)]
If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III.], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27 centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]

When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [See section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [See sections A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

   b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]

If the inspection required by 40 CFR 63.120(b)(10) [See section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [See section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T061 is a 41,351.32 barrel petroleum liquid storage tank identified as PR-500066. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z)<br><br>40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.a through A.I.2.e.<br><br>See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised “emission activity category” form, including the results of

the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121, except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

a. [40 CFR 63.119(c)(1)]
The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [See sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL
The secondary seal shall meet the additional requirements specified below:

   a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.160(b)(4) [See section A.III].

   b. There shall be no holes, tears, or other openings in the seal or seal fabric.

## III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

   a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

   b. the types of petroleum liquids stored in the tank;

   c. the annual throughput of any petroleum liquid stored in the tank; and

   d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

   a. [40 CFR 63.646(b)(1)]
   The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

   b. [40 CFR 63.646(b)(2)]
   When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage

vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(d) (for EFR tanks)]
The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III].

c. [40 CFR 63.123(g)]
When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III.], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

a. [40 CFR 63.120(b)(1)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

i. [40 CFR 63.120(b)(1)(i)]
Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

ii. [40 CFR 63.120(b)(1)(iii)]

Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

iii. [40 CFR 63.120(b)(1)(iv)]
If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III.], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27 centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]

When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [See section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [See sections A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

   b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]

If the inspection required by 40 CFR 63.120(b)(10) [See section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [See section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T063 is a 37,596.55 barrel fixed roof storage vessel identified as tank number PR-500068. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

10. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

11. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **T064**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T064 is a 37,597.66 barrel fixed roof storage vessel identified as tank number PR-500069. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

12. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

13. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **T066**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T066 is a 37,599.55 barrel fixed roof storage vessel identified as tank number PR-500071. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

14. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

15. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **T067**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T067 is a 63,941.63 barrel fixed roof storage vessel identified as tank number PR-500073. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

16. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

17. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T072 is a 10,106.74 barrel petroleum liquid storage tank identified as PR-500082. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z)<br><br>40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.a through A.I.2.e.<br><br>See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised "emission activity category" form, including the results of the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121, except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

a. [40 CFR 63.119(c)(1)]

The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [See sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL
The secondary seal shall meet the additional requirements specified below:

a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.160(b)(4) [See section A.III].

b. There shall be no holes, tears, or other openings in the seal or seal fabric.

## III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

b. the types of petroleum liquids stored in the tank;

c. the annual throughput of any petroleum liquid stored in the tank; and

d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

a. [40 CFR 63.646(b)(1)]
The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

b. [40 CFR 63.646(b)(2)]
When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(d) (for EFR tanks)]
The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III].

c. [40 CFR 63.123(g)]
When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III.], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

a. [40 CFR 63.120(b)(1)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

i. [40 CFR 63.120(b)(1)(i)]
Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

ii. [40 CFR 63.120(b)(1)(iii)]
Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

iii. [40 CFR 63.120(b)(1)(iv)]
If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III.], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27

centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the

conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]
When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [See section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [See sections A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days

prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]
If the inspection required by 40 CFR 63.120(b)(10) [See section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [See section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T073 is a 5,260.22 barrel petroleum liquid storage tank identified as PR-500084. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z)<br><br>40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.a through A.I.2.e.<br><br>See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised “emission activity category” form, including the results of

the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121, except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

a. [40 CFR 63.119(c)(1)]
The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [See sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL
The secondary seal shall meet the additional requirements specified below:

   a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.160(b)(4) [See section A.III].

   b. There shall be no holes, tears, or other openings in the seal or seal fabric.

## III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

   a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

   b. the types of petroleum liquids stored in the tank;

   c. the annual throughput of any petroleum liquid stored in the tank; and

   d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

   a. [40 CFR 63.646(b)(1)]
   The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

   b. [40 CFR 63.646(b)(2)]
   When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage

vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(d) (for EFR tanks)]
The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III].

c. [40 CFR 63.123(g)]
When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III.], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

a. [40 CFR 63.120(b)(1)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

i. [40 CFR 63.120(b)(1)(i)]
Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

ii. [40 CFR 63.120(b)(1)(iii)]

Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

iii. [40 CFR 63.120(b)(1)(iv)]
If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III.], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27 centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]

When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [See section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [See sections A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

   b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]

If the inspection required by 40 CFR 63.120(b)(10) [See section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [See section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T074 is a 10,491 barrel storage tank identified as PR-500094. The tank has an internal floating roof with dual seals. It is currently operated as a Group 1 storage vessel under 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(L) | See sections A.I.2.a through A.I.2.c. |
| | 40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.d through A.I.2.g and A.II.1. |

**2. Additional Terms and Conditions**

2.a The fixed roof storage tank shall be equipped with an internal floating roof.

2.b The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

2.c All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

2.d. Each permittee of a Group 1 storage vessel subject to 40 CFR Part 63, Subpart CC shall comply with the requirements of 40 CFR 63.119 through 63.121 (Subpart G) except as provided in 63.646(b) through 63.646(l) of Subpart CC.

2.e. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

2.f. The permittee who uses a fixed roof and an internal floating roof shall comply with the requirements specified in 40 CFR 63.119(b)(1), (2) and (3) [See section A.II.].

2.g. To demonstrate compliance with 40 CFR 63.119(b) of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements of 63.120(a) of Subpart G [See section A.III.].

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply to Group 1 storage vessels at existing sources:

a. If a cover or lid is installed on an opening on a floating roof, the cover or lid shall remain closed except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

2. [40 CFR 63.119(b)]
[Note: The intent of 40 CFR 63.119(b)(1) and (b)(2) of Subpart G is to avoid having a vapor space between the floating roof and the stored liquid for extended periods. Storage vessels may be emptied for purposes such as routine storage vessel maintenance, inspections, petroleum liquid deliveries, or transfer operations. Storage vessels where liquid is left on walls, as bottom clingage, or in pools due to floor irregularity are considered completely empty.]

a. [40 CFR 63.119(b)(1)]
The internal floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

b. [40 CFR 63.119(b)(2)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

c. [40 CFR 63.119(b)(3)]
Each internal floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. Except as provided in paragraph iv. of this section, the closure device shall consist of one of the devices listed in paragraphs i., ii., or iii. of this section.

i. A liquid-mounted seal as defined in 40 CFR 63.111.

ii. A metallic shoe seal as defined in 40 CFR 63.111.

iii. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor- mounted, but both must be continuous seals.

iv. If the internal floating roof is equipped with a vapor-mounted seal as of July 15, 1994, the requirement for one of the seal options specified in paragraphs i., ii., and iii. of this section does not apply until the earlier of the dates: the next time the storage vessel is emptied and degassed or no later than 10 years after August 18, 1995.

## III. Monitoring and/or Record Keeping Requirements

1. [OAC 3745-21-09(L)]
The permittee shall maintain records of the following information:

a. the types of petroleum liquids stored in the tank; and

b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

2. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

3. [40 CFR 63.646(b)]
As used in 40 CFR Part 63, Subpart CC, all terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 40 CFR 63.119 of Subpart G.

a. [40 CFR 63.646(b)(1)]
The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

b. [40 CFR 63.646(b)(2)]
When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage

vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

4. [6 40 CFR 3.120(a)] INSPECTIONS
To demonstrate compliance with 40 CFR 63.119(b) [See section A.I.2.f.] of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements in the paragraphs a., b. and c. of this section.

a. [40 CFR 63.120(a)(1)]
The permittee shall visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), according to the schedule specified in 63.120(a)(3), see paragraph b. of this section.

b. [40 CFR 63.120(a)(3); (a)(3)(i) - (a)(3)(iii)]
For vessels equipped with a double-seal system, the permittee shall perform either the inspection required by paragraph i. of this section or the inspections required by both paragraphs ii. and iii. of this section.

i. Visually inspect the internal floating roof , the primary seal, and secondary seal each time the storage vessel is emptied and degassed and at least once every 5 years after the first degassing and cleaning activity after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

ii. The permittee shall visually inspect the internal floating roof and the secondary seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill, or at least once every 12 months after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

iii. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal each time the vessel is emptied and degassed and at least once every 10 years after the first degassing and cleaning activity after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

[Note: The permittee is not required to comply with the provisions for gaskets, slotted membranes and sleeve seals in 40 CFR 63.120(a)(3). This exemption is found under 40 CFR 63.646(e).]

c. [40 CFR 63.120(a)(4)]
If during the inspections required by b.ii of this section, the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached; or there are holes or tears in the seal fabric; or there are visible gaps between the seal and the wall of the storage vessel, the permittee shall repair the items or empty and remove the storage vessel from service within 45 calendar days. If a failure that is detected during inspections required by paragraph b.ii of this section cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to

utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

d. [40 CFR 63.120(a)(7)]
If during the inspections required by 40 CFR 63.120(a)(3)(i) or (a)(3)(iii) [See paragraph b. of this section.], the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with organic HAP.

5. [40 CFR 63.646(e)]
When complying with the inspection requirements of 40 CFR 63.120 of Subpart G, the permittees of storage vessels at existing sources subject to 40 CFR Part 63, Subpart CC, are not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(c)]
The permittee shall keep a record that each inspection required by 40 CFR 63.120(a) [See section A.III.] was performed.

c. [40 CFR 63.123(g)]
The permittee who elects to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(a)(4) [See section A.III.] shall keep in a readily accessible location, the documentation specified in 63.120(a)(4) [See section A.III.] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

## IV. Reporting Requirements

1. [40 CFR 63.642(f)]

All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator of USEPA and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

| | |
|---|---|
| EPA Region V<br>Director<br>Air and Radiation Division<br>77 West Jackson Boulevard<br>Chicago, Illinois 60604-3507 | Toledo Division of Environmental Services<br>Air Section<br>348 South Erie Street<br>Toledo, Ohio 43602-1633 |

2. [40 CFR 63.646(l)]
The State or local permitting authority can waive the notification requirements of 40 CFR 63.120(a)(5), 63.120(a)(6), 63.120(b)(10)(ii), and 63.120(b)(10)(iii) for all or some storage vessels at petroleum refineries subject to this subpart. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notifications in 40 CFR 63.120(a)(6) or 63.120(b)(10)(iii) for all storage vessels at a refinery or for individual storage vessels on a case-by-case basis.

3. [40 CFR 63.654(g)]
The permittee shall submit Periodic Reports no later than 60 days after the end of each 6-month period when any of the compliance exceptions specified in paragraphs a. and b. below, occur. The first 6-month period shall begin on the date the Notification of Compliance Status report is required to be submitted. (Existing Group 1 storage vessels shall be in compliance at the first degassing and cleaning activity after August 18, 1998, or by August 18, 2005, whichever is first [40 CFR 63.640(h)(4)]). A Periodic Report is not required if none of the compliance exceptions specified in paragraphs a. and b. occurred during the 6-month period unless emissions averaging is utilized. The permittee may submit reports required by other regulations in place of or as part of the Periodic Report required by this paragraph if the reports contain the information required by paragraphs a. and b. below.

a. [40 CFR 63.654(g)(1)]
For storage vessels, Periodic Reports shall include the information specified for Periodic Reports in paragraph b., except that information related to gaskets, slotted membranes, and sleeve seals is not required for storage vessels that are part of an existing source.

b. [40 CFR 63.654(g)(2) and (2)(i)(A) through (2)(i)(C)]
The permittee shall submit the results of each inspection conducted in accordance with 40 CFR 63.120(a) of Subpart G [See section A.III.] in which a failure is detected in the control equipment. For vessels for which annual inspections are required under 63.120(a)(3)(ii) [See section A.III.], the specifications and requirements listed in paragraphs i. through iii. of this section apply.

i. A failure is defined as any time in which the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached from the

internal floating roof; or there are holes, and date the repair was made or the date the storage vessel was emptied.

ii. Except as provided in paragraph iii. of this section, each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made or the date the storage vessel was emptied.

iii. If an extension is utilized in accordance with 40 CFR 63.120(a)(4) of Subpart G, [See section A.III.], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 63.120(a)(4) of Subpart G, [See section A.III.]; and describe the date the storage vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(2)(ii) and (2)(ii)(A) through (2)(ii)(B)]
For vessels for which inspections are required under 40 CFR 63.120(a)(3)(i) or (a)(3)(iii) [See section A.III.] (i.e., internal inspections), the specifications and requirements listed in paragraphs i. through ii. of this section apply.

i. A failure is defined as any time in which the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal (if one has been installed) has holes, tears, or other openings in the seal or the seal fabric.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

4. [40 CFR 63.654(h)(2) and (h)(2)(i)]
Reports shall be submitted as specified in Subpart A of 40 CFR Part 63 and for storage vessels, notifications of inspections as specified in the following paragraphs, a. through c. In order to afford the Administrator the opportunity to have an observer present, the permittee shall notify the Administrator of the refilling of each Group 1 storage vessel that has been emptied and degassed.

a. [40 CFR 63.654(h)(2)(i)(A)]
Except as provided in paragraphs b. and c. of this section, the permittee shall notify the Administrator in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP's to afford the Administrator the opportunity to inspect the storage vessel prior to refilling.

b. [40 CFR 63.654(h)(2)(i)(B)]
Except as provided in paragraph c. of this section, if the internal inspection required by 40 CFR 63.120(a)(3), is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP's, the

permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. This notification, including the written documentation, may also be made in writing and sent so that it is received by the Administrator at least 7 calendar days prior to the refilling.

c. [40 CFR 63.654(h)(2)(i)(C)]
The State or local permitting authority can waive the notification requirements of paragraph a. and/or b. of this section for all or some storage vessels at petroleum refineries subject to 40 CFR Part 63, Subpart CC. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph a. of this section or sooner than 7 days after submitting the notification required by paragraph b. of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

Emissions Unit ID: **T075**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T075 is a 6,714.72 barrel fixed roof storage vessel identified as tank number PR-500106. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

2. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **T076**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T076 is a 6,714.72 barrel fixed roof storage vessel identified as tank number PR-500107. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

3. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

4. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **T077**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T077 is a 6,714.72 barrel fixed roof storage vessel identified as tank number PR-500108. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

5. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

6. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T078 is a 6,709.74 barrel fixed roof storage vessel identified as tank number PR-500109. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

7. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

8. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **T079**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T079 is a 6,714.72 barrel fixed roof storage vessel identified as tank number PR-500110. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

9. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

10. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T080 is a 80,676.92 barrel fixed roof storage vessel identified as tank number PR-500111. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

11. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

12. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T081 is a 80,000 barrel fixed roof storage vessel identified as tank number PR-500112. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

13. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

14. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **T082**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T082 is a 30,056.59 barrel fixed roof storage vessel identified as tank number PR-500118. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

15. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

16. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **T082**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T082 is a 30,056.59 barrel fixed roof storage vessel identified as tank number PR-500118. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

17. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

18. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **T083**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T083 is a 42,492.86 barrel fixed roof storage vessel identified as tank number PR-500133. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

19. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

20. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T084 is a 71,165.97 barrel petroleum liquid storage tank identified as PR-500134. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z)<br><br>40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.a through A.I.2.e.<br><br>See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised "emission activity category" form, including the results of the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121, except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

a. [40 CFR 63.119(c)(1)]

The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [See sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL
The secondary seal shall meet the additional requirements specified below:

a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.160(b)(4) [See section A.III].

b. There shall be no holes, tears, or other openings in the seal or seal fabric.

## III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

b. the types of petroleum liquids stored in the tank;

c. the annual throughput of any petroleum liquid stored in the tank; and

d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

a. [40 CFR 63.646(b)(1)]
The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

b. [40 CFR 63.646(b)(2)]
When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(d) (for EFR tanks)]
The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III].

c. [40 CFR 63.123(g)]
When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III.], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

a. [40 CFR 63.120(b)(1)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

i. [40 CFR 63.120(b)(1)(i)]
Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

ii. [40 CFR 63.120(b)(1)(iii)]
Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

iii. [40 CFR 63.120(b)(1)(iv)]
If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III.], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27

centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the

conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]
When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [See section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [See sections A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days

prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]
If the inspection required by 40 CFR 63.120(b)(10) [See section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [See section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T085 is a 78,834.6 barrel petroleum liquid storage tank identified as PR-500135. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z)<br><br>40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.a through A.I.2.e.<br><br>See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised “emission activity category” form, including the results of

the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121, except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

a. [40 CFR 63.119(c)(1)]
The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [See sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL
The secondary seal shall meet the additional requirements specified below:

   a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.160(b)(4) [See section A.III].

   b. There shall be no holes, tears, or other openings in the seal or seal fabric.

## III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

   a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

   b. the types of petroleum liquids stored in the tank;

   c. the annual throughput of any petroleum liquid stored in the tank; and

   d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

   a. [40 CFR 63.646(b)(1)]
   The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

   b. [40 CFR 63.646(b)(2)]
   When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage

vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(d) (for EFR tanks)]
The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III].

c. [40 CFR 63.123(g)]
When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III.], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

a. [40 CFR 63.120(b)(1)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

i. [40 CFR 63.120(b)(1)(i)]
Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

ii. [40 CFR 63.120(b)(1)(iii)]

Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

iii. [40 CFR 63.120(b)(1)(iv)]
If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III.], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27 centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]

When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [See section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [See sections A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

   b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]

If the inspection required by 40 CFR 63.120(b)(10) [See section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [See section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

Emissions Unit ID: **T086**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T086 is a 78,994.84 barrel fixed roof storage vessel identified as tank number PR-500140. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

10. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

11. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **T087**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T087 is a 79,568.3 barrel fixed roof storage vessel identified as tank number PR-500141. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

12. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

13. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T088 is a 80,799.17 barrel fixed roof storage vessel identified as tank number PR-500142. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

14. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

15. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **T089**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T089 is a 79,570.35 barrel fixed roof storage vessel identified as tank number PR-500151. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

16. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

17. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T090 is a 41,586.15 barrel petroleum liquid storage tank identified as PR-500187. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z)<br><br>40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.a through A.I.2.e.<br><br>See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised "emission activity category" form, including the results of the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121, except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

a. [40 CFR 63.119(c)(1)]

The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [See sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL
The secondary seal shall meet the additional requirements specified below:

a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.160(b)(4) [See section A.III].

b. There shall be no holes, tears, or other openings in the seal or seal fabric.

## III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

b. the types of petroleum liquids stored in the tank;

c. the annual throughput of any petroleum liquid stored in the tank; and

d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

a. [40 CFR 63.646(b)(1)]
The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

b. [40 CFR 63.646(b)(2)]
When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(d) (for EFR tanks)]
The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III].

c. [40 CFR 63.123(g)]
When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III.], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

a. [40 CFR 63.120(b)(1)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

i. [40 CFR 63.120(b)(1)(i)]
Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

ii. [40 CFR 63.120(b)(1)(iii)]
Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

iii. [40 CFR 63.120(b)(1)(iv)]
If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III.], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27

centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the

conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]
When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [See section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [See sections A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days

prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]
If the inspection required by 40 CFR 63.120(b)(10) [See section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [See section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T091 is a 42,065.3 barrel petroleum liquid storage tank identified as PR-500188. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z)<br><br>40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.a through A.I.2.e.<br><br>See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised “emission activity category” form, including the results of

the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121, except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

a. [40 CFR 63.119(c)(1)]
The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [See sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL
The secondary seal shall meet the additional requirements specified below:

   a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.160(b)(4) [See section A.III].

   b. There shall be no holes, tears, or other openings in the seal or seal fabric.

## III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

   a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

   b. the types of petroleum liquids stored in the tank;

   c. the annual throughput of any petroleum liquid stored in the tank; and

   d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

   a. [40 CFR 63.646(b)(1)]
   The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

   b. [40 CFR 63.646(b)(2)]
   When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage

vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(d) (for EFR tanks)]
The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III].

c. [40 CFR 63.123(g)]
When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III.], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

a. [40 CFR 63.120(b)(1)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

i. [40 CFR 63.120(b)(1)(i)]
Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

ii. [40 CFR 63.120(b)(1)(iii)]

Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

iii. [40 CFR 63.120(b)(1)(iv)]
If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III.], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27 centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]

When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [See section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [See sections A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

   b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]

If the inspection required by 40 CFR 63.120(b)(10) [See section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [See section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

Emissions Unit ID: **T092**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T092 is a 119,238 barrel fixed roof storage vessel identified as tank number PR-500517. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

10. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

11. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **T093**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T093 is a 10,123.22 barrel fixed roof storage vessel identified as tank number PR-500230. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

12. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

13. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

Emissions Unit ID: **T093**

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T096 is a 19,276.11 barrel petroleum liquid storage tank identified as PR-500269. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z)<br><br>40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.a through A.I.2.e.<br><br>See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised "emission activity category" form, including the results of the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121, except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

a. [40 CFR 63.119(c)(1)]

The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [See sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL
The secondary seal shall meet the additional requirements specified below:

a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.160(b)(4) [See section A.III].

b. There shall be no holes, tears, or other openings in the seal or seal fabric.

## III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

b. the types of petroleum liquids stored in the tank;

c. the annual throughput of any petroleum liquid stored in the tank; and

d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

a. [40 CFR 63.646(b)(1)]
The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

b. [40 CFR 63.646(b)(2)]
When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(d) (for EFR tanks)]
The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III].

c. [40 CFR 63.123(g)]
When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III.], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

a. [40 CFR 63.120(b)(1)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

i. [40 CFR 63.120(b)(1)(i)]
Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

ii. [40 CFR 63.120(b)(1)(iii)]
Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

iii. [40 CFR 63.120(b)(1)(iv)]
If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III.], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27

centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the

conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]
When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [See section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [See sections A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days

prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]
If the inspection required by 40 CFR 63.120(b)(10) [See section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [See section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T097 is a 19,563.97 barrel petroleum liquid storage tank identified as PR-500270. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z)<br><br>40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.a through A.I.2.e.<br><br>See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised “emission activity category” form, including the results of

the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121, except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

a. [40 CFR 63.119(c)(1)]
The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [See sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL
The secondary seal shall meet the additional requirements specified below:

   a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.160(b)(4) [See section A.III].

   b. There shall be no holes, tears, or other openings in the seal or seal fabric.

## III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

   a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

   b. the types of petroleum liquids stored in the tank;

   c. the annual throughput of any petroleum liquid stored in the tank; and

   d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

   a. [40 CFR 63.646(b)(1)]
   The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

   b. [40 CFR 63.646(b)(2)]
   When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage

vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(d) (for EFR tanks)]
The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III].

c. [40 CFR 63.123(g)]
When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III.], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

a. [40 CFR 63.120(b)(1)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

i. [40 CFR 63.120(b)(1)(i)]
Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

ii. [40 CFR 63.120(b)(1)(iii)]

Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

iii. [40 CFR 63.120(b)(1)(iv)]
If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III.], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27 centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]

When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [See section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [See sections A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

   b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]

If the inspection required by 40 CFR 63.120(b)(10) [See section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [See section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T099 is a 12,693.4 barrel fixed roof storage vessel identified as tank number PR-500401. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

10. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

11. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **T100**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T100 is a 2,538.08 barrel fixed roof storage vessel identified as tank number PR-500402. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

12. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

13. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **T101**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T101 is a 9,429.74 barrel fixed roof storage vessel identified as tank number PR-500404. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

14. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

15. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T102 is a 147,845.1 barrel petroleum liquid storage tank identified as PR-500645. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z)<br><br>40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.a through A.I.2.e.<br><br>See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised "emission activity category" form, including the results of the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121, except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply while this emissions unit is classified as a Group 1 storage vessel:

a. Covers or lids installed on an opening on a floating roof shall remain closed, except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

2. The external floating roof shall comply with the following:

a. [40 CFR 63.119(c)(1)]

The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge.

i. Except as provided in 40 CFR 63.119(c)(1)(iv), paragraph iv. of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

ii. Except as provided in 40 CFR 63.119(c)(1)(v), the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by 40 CFR 63.120(b) [See sections A.II and A.III], both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

iv. If the external floating roof is equipped with a liquid-mounted or metallic shoe primary seal as of August 18, 1995, the requirement for a secondary seal in 40 CFR 63.119(c)(1)(i), paragraph i. of this section, does not apply until the earlier of the dates specified below:

(a) the next time the storage vessel is emptied and degassed; or

(b) no later than 10 years after August 18, 1995.

b. [40 CFR 63.119(c)(3)]
The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

c. [40 CFR 63.119(c)(4)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

3. [40 CFR 63.120(b)(5)] PRIMARY SEAL
The primary seal shall meet the additional requirements specified below:

a. Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.

b. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

4. [40 CFR 63.120(b)(6)] SECONDARY SEAL
The secondary seal shall meet the additional requirements specified below:

a. The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in 40 CFR 63.160(b)(4) [See section A.III].

b. There shall be no holes, tears, or other openings in the seal or seal fabric.

## III. Monitoring and/or Record Keeping Requirements

1. The seal and seal fabric shall be inspected annually for visible holes, tears, or other openings.

2. The secondary seal gap shall be measured annually in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

3. The primary seal gap shall be measured at least once every 5 years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10.

4. The permittee shall maintain records of the following information:

a. the dates and results of any seal and seal fabric inspections and any seal gap measurements;

b. the types of petroleum liquids stored in the tank;

c. the annual throughput of any petroleum liquid stored in the tank; and

d. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

5. [40 CFR 63.646(b)]
All terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 63.119 of 40 CFR Part 63, Subpart G.

a. [40 CFR 63.646(b)(1)]
The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

b. [40 CFR 63.646(b)(2)]
When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(d) (for EFR tanks)]
The permittee shall keep records describing the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See sections A.II and A.III] The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III].

c. [40 CFR 63.123(g)]
When electing to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III.], the permittee shall keep in a readily accessible location, the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. [40 CFR 63.120(b)] STORAGE VESSEL INSPECTIONS

a. [40 CFR 63.120(b)(1)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III], the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in the following paragraphs:

i. [40 CFR 63.120(b)(1)(i)]
Measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, whichever occurs last, and at least once every 5 years thereafter.

ii. [40 CFR 63.120(b)(1)(iii)]
Measurements of gaps between the vessel wall and the secondary seal shall be performed by the compliance date specified in 40 CFR 63.640(h) of Subpart CC, and at least once per year thereafter.

iii. [40 CFR 63.120(b)(1)(iv)]
If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels as defined in 40 CFR 63.641 for a period of 1 year or more, measurements of gaps between the vessel wall and the primary seal, and gaps between the vessel wall and the secondary seal shall be performed within 90 calendar days of the vessel being refilled with organic HAP.

b. [40 CFR 63.120(b)(2)]
Except as provided in 40 CFR 63.120(b)(7) [See section A.III.], the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in the following paragraphs.

i. Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

ii. Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

iii. The total surface area of each gap described in paragraph b.ii. of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

c. [40 CFR 63.120(b)(3)]
The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the primary seal shall not exceed 212 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.

d. [40 CFR 63.120(b)(4)]
The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the vessel. The accumulated area of gaps between the vessel wall and the secondary seal shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27

centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by 40 CFR 63.120(b)(1) [See section A.III].

e. [40 CFR 63.120(b)(7); (b)(7)(i) and (b)(7)(ii)]
If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or to inspect the vessel to determine compliance with 40 CFR 63.120(b)(5) and (b)(6) [See section A.II] because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following requirements:

i. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

ii. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

f. [40 CFR 63.120(b)(8)]
The permittee shall repair conditions that do not meet requirements listed in 40 CFR 63.120(b)(3), (b)(4), (b)(5) and (b)(6) [See sections A.II and A.III] (i.e., failures) no later than 45 calendar days after identification, or shall empty and remove the storage vessel from service no later than 45 calendar days after identification. If during seal gap measurements required in 40 CFR 63.120(b)(1) and (b)(2) [See section A.III] or during inspections necessary to determine compliance with 63.120(b)(5) and (b)(6) [See section A.II], a failure is detected that cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

8. [40 CFR 63.120(b)(10) and (b)(10)(i)] - INSPECTIONS
The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the

conditions specified in this paragraph exist before filling or refilling the storage vessel with organic HAP.

9. [40 CFR 63.646(e)]
When complying with the inspection requirements of 40 CFR 63.120, the permittee is not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

10. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services within 30 days of any seal and seal fabric inspection or any seal gap measurement which documents a violation of the applicable control equipment requirements. The notification shall also describe the corrective actions which have been or will be taken to achieve compliance.

2. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

3. [40 CFR 63.122(h)(1) and 63.654(h)(2)(i)] NOTIFICATION OF REFILLING STORAGE VESSELS
In order to afford the Toledo Division of Environmental Services the opportunity to have an observer present, the permittee shall notify the Toledo Division of Environmental Services of the refilling of each Group 1 storage vessel that has been emptied or degassed.

   a. [40 CFR 63.120(b)(10)(ii) and 63.654(h)(2)(i)(A)]
   Except as provided in 40 CFR 63.120(b)(10)(iii) [See section A.IV], for all the inspections required by 40 CFR 63.120(b)(10) [See sections A.III], the permittee shall notify the Toledo Division of Environmental Services in writing at least 30 calendar days

prior to filling or refilling of each storage vessel with organic HAP to afford the Toledo LAA the opportunity to inspect the storage vessel prior to refilling.

b. [40 CFR 63.120(b)(10)(iii) and 63.654(h)(2)(i)(B)]
If the inspection required by 40 CFR 63.120(b)(10) [See section A.III] is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Toledo Division of Environmental Services at least 7 calendar days prior to the refilling.

c. [40 CFR 63.646(l) and 63.654(h)(2)(i)(C)]
The Ohio EPA or Toledo Division of Environmental Services can waive the notification requirements of 3.a and 3.b of this section for all or some storage vessels subject to 40 CFR Part 63, Subpart CC. The Ohio EPA or Toledo Division of Environmental Services may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph 3.a of this section, or sooner than 7 days after submitting the notification required by 3.b of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

4. [40 CFR 63.120(b)(9) and 63.654(h)(2)(ii)] NOTIFICATION OF SEAL GAP MEASUREMENTS
The permittee shall notify the Toledo Division of Environmental Services in writing 30 calendar days in advance of any seal gap measurements required by 40 CFR 63.120(b)(1) or (b)(2) [See section A.III] to afford the Toledo Division of Environmental Services the opportunity to have an observer present. The Ohio EPA or Toledo Division of Environmental Services can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

5. [40 CFR 63.654(g)(3)] PERIODIC REPORTING
The permittee shall meet the periodic reporting requirements specified in the following paragraphs.

a. The permittee shall submit, as part of the Periodic Report, documentation of the results of each seal gap measurement made in accordance with 40 CFR 63.120(b) [See section A.III] in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) [See section A.II and A.III] are not met. This documentation shall include the following information:

i. the date of the seal gap measurement;

ii. the raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) [See section A.III];

iii. a description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) [See section A.II] that is not met; and

iv. a description of the nature of and date the repair was made, or the date the storage vessel was emptied.

b. [40 CFR 63.654(g)(3)(ii)]
If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(b)(7)(ii) or (b)(8) [See section A.III], as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(3)(iii)]
The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR63.120(b)(10) [See section A.III]. This documentation shall meet the following specifications and requirements.

i. A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or, for a storage vessel that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage vessel that is part of a new source, the slotted membrane has more than 10 percent open area.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | None | None |

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T106 is a 10,106.74 barrel fixed roof storage vessel identified as tank number PR-500703. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

10. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

11. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **T107**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T107 is a 10,106.74 barrel fixed roof storage vessel identified as tank number PR-500704. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

12. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

13. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **T108**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T108 is a 10,106.74 barrel fixed roof storage vessel identified as tank number PR-500705. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

14. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

15. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T109 is a 20,120 barrel fixed roof storage vessel identified as tank number PR-500706. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

16. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

17. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

Emissions Unit ID: **T109**

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T110 is a 54,126.29 barrel fixed roof storage vessel identified as tank number PR-500761. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

18. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

19. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **T111**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T111 is a 42,731.97 barrel fixed roof storage vessel identified as tank number PR-500775. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

20. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

21. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T113 is a 10,206 barrel fixed roof storage vessel identified as tank number PR-500890. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | OAC rule 3745-31-05(A)(3) (PTI 04-1066) | 21.21 tons per year volatile organic compounds (VOC) |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |
| | 40 CFR Part 60, Subpart K | See section A.I.2.c. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

2.c As specified under 40 CFR 63.640(n)(7), a Group 2 storage vessel that is subject to the provisions of 40 CFR Part 60, Subpart K, but not to the control requirements of K, is required to only comply with the provisions of 40 CFR Part 63, Subpart CC.

## II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

2. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

1. Compliance with the applicable emission control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

   Emission Limitation:

21.21 tons per year VOC

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using an emission calculation using the most recent AP-42 emissions factors from Section 7.1 and the actual annual tank throughput.

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **T114**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T114 is a 15,469 barrel fixed roof storage vessel identified as tank number PR-500891. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | OAC rule 3745-31-05(A)(3) (PTI 04-1066) | 26.22 tons per year volatile organic compounds (VOC) |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |
| | 40 CFR Part 60, Subpart K | See section A.I.2.c. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

2.c As specified under 40 CFR 63.640(n)(7), a Group 2 storage vessel that is subject to the provisions of 40 CFR Part 60, Subpart K, but not to the control requirements of K, is required to only comply with the provisions of 40 CFR Part 63, Subpart CC.

## II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

2. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

1. Compliance with the applicable emission control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

   Emission Limitation:

26.22 tons per year VOC

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using an emission calculation using the most recent AP-42 emissions factors from Section 7.1 and the actual annual tank throughput.

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **T115**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T115 is a 139,200 barrel fixed roof storage vessel identified as tank number PR-500892. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | OAC rule 3745-31-05(A)(3) (PTI 04-1066) | 38.93 tons per year volatile organic compounds (VOC) |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |
| | 40 CFR Part 60, Subpart K | See section A.I.2.c. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

2.c As specified under 40 CFR 63.640(n)(7), a Group 2 storage vessel that is subject to the provisions of 40 CFR Part 60, Subpart K, but not to the control requirements of K, is required to only comply with the provisions of 40 CFR Part 63, Subpart CC.

## II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

2. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

1. Compliance with the applicable emission control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

   Emission Limitation:

38.93 tons per year VOC

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using an emission calculation using the most recent AP-42 emissions factors from Section 7.1 and the actual annual tank throughput.

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **T116**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T116 is a 139,345 barrel fixed roof storage vessel identified as tank number PR-500893. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | OAC rule 3745-31-05(A)(3) (PTI 04-1066) | 36.54 tons per year volatile organic compounds (VOC) |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |
| | 40 CFR Part 60, Subpart K | See section A.I.2.c. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

2.c As specified under 40 CFR 63.640(n)(7), a Group 2 storage vessel that is subject to the provisions of 40 CFR Part 60, Subpart K, but not to the control requirements of K, is required to only comply with the provisions of 40 CFR Part 63, Subpart CC.

## II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

2. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

1. Compliance with the applicable emission control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

   Emission Limitation:

36.54 tons per year VOC

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using an emission calculation using the most recent AP-42 emissions factors from Section 7.1 and the actual annual tank throughput.

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T120 is a 59,415.58 barrel petroleum liquid storage tank identified as PR-500132. It has an external floating roof with a mechanical shoe primary seal and a rim mounted flexible wiper secondary seal. It is currently classified as a Group 1 storage vessel pursuant to 40 CFR Part 63, Subpart CC. | OAC rule 3745-21-09(Z) | See sections A.I.2.a through A.I.2.e. |
| | 40 CFR Part 63, Subpart CC<br>40 CFR 63.646 (a), (f) and (g) | See sections A.I.2.f, A.I.2.g, and A.II.1 through A.II.4. |
| | OAC rule 3745-31-05(A)(3)<br>(PTI 04-131) | See section A.I.2.h. |
| | 40 CFR Part 60, Subpart Ka | See section A.I.2.i. |

**2. Additional Terms and Conditions**

2.a Any welded external floating roof storage tank equipped with a mechanical shoe primary seal and rim-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 or a mechanical shoe primary seal and a shoe-mounted secondary seal, and the mechanical shoe primary seal was installed on or after 1/01/81 shall meet the following requirements:

i. There shall be no visible holes, tears or other openings in the seal or seal fabric.

ii. For the primary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

iii. For the secondary seal, the total seal gap area shall not exceed 1.0 square inch per foot of tank diameter.

The permittee may change the seal types during the term of this permit provided that a written notification and revised “emission activity category” form, including the results of

the latest seal gap measurements, are submitted to the Toledo Division of Environmental Services within 30 days after the change occurs.

2.b. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with a projection into the tank below the liquid surface.

2.c. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least 90 percent of the area of the opening.

2.d. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.e. Any slotted gauging/sampling well shall be equipped with an object which floats on the liquid surface within the well and which covers at least 90 percent of the area of the well opening.

2.f. While this emissions unit is operated in Group 1 service, the permittee shall comply with the requirements of 40 CFR 63.119 through 63.121 except as provided in 63.646(b) through 63.646(l) of Subpart CC [See sections A.II and A.III.]. This emissions unit shall comply with 40 CFR Part 63, Subpart CC by employing an external floating roof with a dual seal system as dictated within these terms and conditions.

2.g. Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

2.h The requirements established pursuant to this rule are less stringent than the requirements specified in 40 CFR Part 63, Subpart CC.

2.i As specified under 40 CFR 63.640(n)(5), a Group 1 storage vessel that is also subject to the provisions of 40 CFR Part 60, Subpart Ka is required to only comply with the provisions of 40 CFR Part 63, Subpart CC.

## II. Operational Restrictions

2.a As specified under 40 CFR 63.640(n)(5), a Group 1 storage vessel that is also subject to the provisions of 40 CFR Part 60, Subpart K is required to only comply with the provisions of 40 CFR Part 63, Subpart CC.

2.b The requirements specified by this rule are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3).

2.c The requirements of this rule also include compliance with OAC rule 3745-31-05(A)(3) and 40 CFR Part 60, Subpart K.

2.d The fixed roof storage tank shall be equipped with an internal floating roof.

2.e The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

2.f All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

2.g Each permittee of a Group 1 storage vessel subject to 40 CFR Part 63, Subpart CC shall comply with the requirements of 40 CFR 63.119 through 63.121 (Subpart G) except as provided in 40 CFR 63.646(b) through 63.646(l) of Subpart CC.

2.h Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

2.i The permittee shall comply with the requirements specified in 40 CFR 63.119(b)(1), (2) and (3) [See section A.II.].

2.j To demonstrate compliance with 40 CFR 63.119(b) of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements of 40 CFR 63.120(a) of Subpart G [See section A.III.].

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply to Group 1 storage vessels at existing sources:

a. If a cover or lid is installed on an opening on a floating roof, the cover or lid shall remain closed except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

2. [40 CFR 63.119(b)]
[Note: The intent of 40 CFR 63.119(b)(1) and (b)(2) of Subpart G is to avoid having a vapor space between the floating roof and the stored liquid for extended periods. Storage vessels may be emptied for purposes such as routine storage vessel maintenance, inspections, petroleum liquid deliveries, or transfer operations. Storage vessels where liquid is left on walls, as bottom clingage, or in pools due to floor irregularity are considered completely empty.]

a. [40 CFR 63.119(b)(1)]
The internal floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

b. [40 CFR 63.119(b)(2)]
When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

c. [40 CFR 63.119(b)(3)]
Each internal floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. Except as provided in paragraph iv. of this section, the closure device shall consist of one of the devices listed in paragraphs i., ii., or iii. of this section.

i. A liquid-mounted seal as defined in 40 CFR 63.111.

ii. A metallic shoe seal as defined in 40 CFR 63.111.

iii. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor- mounted, but both must be continuous seals.

iv. If the internal floating roof is equipped with a vapor-mounted seal as of July 15, 1994, the requirement for one of the seal options specified in paragraphs i., ii., and iii. of this section does not apply until the earlier of the dates: the next time the storage vessel is emptied and degassed or no later than 10 years after August 18, 1995.

## III. Monitoring and/or Record Keeping Requirements

1. [OAC 3745-21-09(L)]
The permittee shall maintain records of the following information:

a. the types of petroleum liquids stored in the tank; and

b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

2. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be

maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

3. [40 CFR 63.646(b)]
As used in 40 CFR Part 63, Subpart CC, all terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 40 CFR 63.119 of Subpart G.

a. [40 CFR 63.646(b)(1)]
The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

b. [40 CFR 63.646(b)(2)]
When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

4. [6 40 CFR 3.120(a)] INSPECTIONS
To demonstrate compliance with 40 CFR 63.119(b) [See section A.I.2.f.] of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements in the paragraphs a., b. and c. of this section.

a. [40 CFR 63.120(a)(1)]
The permittee shall visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), according to the schedule specified in 40 CFR 63.120(a)(3), see paragraph b. of this section.

b. [40 CFR 63.120(a)(3); (a)(3)(i) - (a)(3)(iii)]
For vessels equipped with a double-seal system, the permittee shall perform either the inspection required by paragraph i. of this section or the inspections required by both paragraphs ii. and iii. of this section.

i. Visually inspect the internal floating roof , the primary seal, and secondary seal each time the storage vessel is emptied and degassed and at least once every 5 years after the first degassing and cleaning activity after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

ii. The permittee shall visually inspect the internal floating roof and the secondary seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill, or at least once every 12 months after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

iii. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal each time the vessel is emptied and degassed and at least once

every 10 years after the first degassing and cleaning activity after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

[Note: The permittee is not required to comply with the provisions for gaskets, slotted membranes and sleeve seals in 40 CFR 63.120(a)(3). This exemption is found under 40 CFR 63.646(e).]

c. [40 CFR 63.120(a)(4)]
If during the inspections required by b.ii of this section, the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached; or there are holes or tears in the seal fabric; or there are visible gaps between the seal and the wall of the storage vessel, the permittee shall repair the items or empty and remove the storage vessel from service within 45 calendar days. If a failure that is detected during inspections required by paragraph b.ii of this section cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

d. [40 CFR 63.120(a)(7)]
If during the inspections required by 40 CFR 63.120(a)(3)(i) or (a)(3)(iii) [See paragraph b. of this section.], the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with organic HAP.

5. [40 CFR 63.646(e)]
When complying with the inspection requirements of 40 CFR 63.120 of Subpart G, the permittees of storage vessels at existing sources subject to 40 CFR Part 63, Subpart CC, are not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(c)]
The permittee shall keep a record that each inspection required by 40 CFR 63.120(a) [See section A.III.] was performed.

c. [40 CFR 63.123(g)]

The permittee who elects to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(a)(4) [See section A.III.] shall keep in a readily accessible location, the documentation specified in 63.120(a)(4) [See section A.III.] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

## IV. Reporting Requirements

1. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator of USEPA and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

| | |
|---|---|
| EPA Region V<br>Director<br>Air and Radiation Division<br>77 West Jackson Boulevard<br>Chicago, Illinois 60604-3507 | Toledo Division of Environmental Services<br>Air Section<br>348 South Erie Street<br>Toledo, Ohio 43602-1633 |

2. [40 CFR 63.646(l)]
The State or local permitting authority can waive the notification requirements of 40 CFR 63.120(a)(5), 63.120(a)(6), 63.120(b)(10)(ii), and 63.120(b)(10)(iii) for all or some storage vessels at petroleum refineries subject to this subpart. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notifications in 40 CFR 63.120(a)(6) or 63.120(b)(10)(iii) for all storage vessels at a refinery or for individual storage vessels on a case-by-case basis.

3. [40 CFR 63.654(g)]
The permittee shall submit Periodic Reports no later than 60 days after the end of each 6-month period when any of the compliance exceptions specified in paragraphs a. and b. below, occur. The first 6-month period shall begin on the date the Notification of Compliance Status report is required to be submitted. (Existing Group 1 storage vessels shall be in compliance at the first degassing and cleaning activity after August 18, 1998, or by August 18, 2005, whichever is first [40 CFR 63.640(h)(4)]). A Periodic Report is not required if none of the compliance exceptions specified in paragraphs a. and b. occurred during the 6-month period unless emissions averaging is utilized.. The permittee may submit reports required by other regulations in place of or as part of the Periodic Report required by this paragraph if the reports contain the information required by paragraphs a. and b. below.

a. [40 CFR 63.654(g)(1)]
For storage vessels, Periodic Reports shall include the information specified for Periodic Reports in paragraph b., except that information related to gaskets, slotted membranes, and sleeve seals is not required for storage vessels that are part of an existing source.

b. [40 CFR 63.654(g)(2) and (2)(i)(A) through (2)(i)(C)]
The permittee shall submit the results of each inspection conducted in accordance with 40 CFR 63.120(a) of Subpart G [See section A.III.] in which a failure is detected in the control equipment. For vessels for which annual inspections are required under 40 CFR 63.120(a)(3)(ii) [See section A.III.], the specifications and requirements listed in paragraphs i. through iii. of this section apply.

i. A failure is defined as any time in which the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached from the internal floating roof; or there are holes, and date the repair was made or the date the storage vessel was emptied.

ii. Except as provided in paragraph iii. of this section, each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made or the date the storage vessel was emptied.

iii. If an extension is utilized in accordance with 40 CFR 63.120(a)(4) of Subpart G, [See section A.III.], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 63.120(a)(4) of Subpart G, [See section A.III.]; and describe the date the storage vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(2)(ii) and (2)(ii)(A) through (2)(ii)(B)]
For vessels for which inspections are required under 40 CFR 63.120(a)(3)(i) or (a)(3)(iii) [See section A.III.] (i.e., internal inspections), the specifications and requirements listed in paragraphs i. through ii. of this section apply.

i. A failure is defined as any time in which the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal (if one has been installed) has holes, tears, or other openings in the seal or the seal fabric.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made.

4. [40 CFR 63.654(h)(2) and (h)(2)(i)]

Reports shall be submitted as specified in Subpart A of 40 CFR Part 63 and for storage vessels, notifications of inspections as specified in the following paragraphs, a. through c. In order to afford the Administrator the opportunity to have an observer present, the permittee shall notify the Administrator of the refilling of each Group 1 storage vessel that has been emptied and degassed.

a. [40 CFR 63.654(h)(2)(i)(A)]
Except as provided in paragraphs b. and c. of this section, the permittee shall notify the Administrator in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP's to afford the Administrator the opportunity to inspect the storage vessel prior to refilling.

b. [40 CFR 63.654(h)(2)(i)(B)]
Except as provided in paragraph c. of this section, if the internal inspection required by 40 CFR 63.120(a)(3), is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP's, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. This notification, including the written documentation, may also be made in writing and sent so that it is received by the Administrator at least 7 calendar days prior to the refilling.

c. [40 CFR 63.654(h)(2)(i)(C)]
The State or local permitting authority can waive the notification requirements of paragraph a. and/or b. of this section for all or some storage vessels at petroleum refineries subject to 40 CFR Part 63, Subpart CC. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph a. of this section or sooner than 7 days after submitting the notification required by paragraph b. of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T122 is a 2,185 barrel fixed roof storage vessel identified as tank number PR-500260. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

22. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

23. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **T136**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T136 is a 23,809.5 barrel fixed roof storage vessel identified as tank number PR-500686. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | OAC rule 3745-31-05(A)(3) (PTI 04-379) | See section A.I.2.c. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |
| | 40 CFR Part 60, Subpart Kb | See section A.III.1. |

**2. Additional Terms and Conditions**

2.a As specified under 40 CFR 63.640(n)(1), a Group 2 storage vessel that is part of an existing source and is also subject to the provisions of 40 CFR Part 60, Subpart Kb, is required to comply only with the requirements of 40 CFR Part 60, Subpart Kb.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

2.c The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(L) and 40 CFR Part 60, Subpart Kb.

#### II. Operational Restrictions

1. The permittee shall store only petroleum liquids with a maximum true vapor pressure less than 76.6 kPa (0.754 psia) in this emissions unit.

#### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records showing:

   a. the type of material stored within the storage vessel;

   b. the true vapor pressure of the stored material at maximum storage temperature; and

   c. the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel.

2. The permittee shall maintain records of the actual annual throughput of each liquid stored in this emissions unit.

3. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except, for the record required by section A.III.1.c which shall be maintained for the life of the emissions unit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall submit a written deviation (excursion) report when the maximum true vapor pressure of the material stored in this storage vessel is greater than or equal to 76.6 kPa (0.754 psia).

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T137 is a 23,809.5 barrel fixed roof storage vessel identified as tank number PR-500688. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | OAC rule 3745-31-05(A)(3) (PTI 04-379) | See section A.I.2.c. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |
| | 40 CFR Part 60, Subpart Kb | See section A.III.1. |

**2. Additional Terms and Conditions**

2.a As specified under 40 CFR 63.640(n)(1), a Group 2 storage vessel that is part of an existing source and is also subject to the provisions of 40 CFR Part 60, Subpart Kb, is required to comply only with the requirements of 40 CFR Part 60, Subpart Kb.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

2.c The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(L) and 40 CFR Part 60, Subpart Kb.

#### II. Operational Restrictions

1. The permittee shall store only petroleum liquids with a maximum true vapor pressure less than 76.6 kPa (0.754 psia) in this emissions unit.

#### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records showing:

   a. the type of material stored within the storage vessel;

   b. the true vapor pressure of the stored material at maximum storage temperature; and

   c. the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel.

2. The permittee shall maintain records of the actual annual throughput of each liquid stored in this emissions unit.

3. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except, for the record required by section A.III.1.c which shall be maintained for the life of the emissions unit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall submit a written deviation (excursion) report when the maximum true vapor pressure of the material stored in this storage vessel is greater than or equal to 76.6 kPa (0.754 psia).

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **T138**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T138 is a 1,428.6 barrel fixed roof storage vessel identified as tank number PR-500687. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | OAC rule 3745-31-05(A)(3) (PTI 04-379) | See section A.I.2.c. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |
| | 40 CFR Part 60, Subpart Kb | See section A.III.1. |

**2. Additional Terms and Conditions**

2.a As specified under 40 CFR 63.640(n)(1), a Group 2 storage vessel that is part of an existing source and is also subject to the provisions of 40 CFR Part 60, Subpart Kb, is required to comply only with the requirements of 40 CFR Part 60, Subpart Kb.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

2.c The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(L) and 40 CFR Part 60, Subpart Kb.

#### II. Operational Restrictions

1. The permittee shall store only petroleum liquids with a maximum true vapor pressure less than 76.6 kPa (0.754 psia) in this emissions unit.

#### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records showing:

   a. the type of material stored within the storage vessel;

   b. the true vapor pressure of the stored material at maximum storage temperature; and

   c. the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel.

2. The permittee shall maintain records of the actual annual throughput of each liquid stored in this emissions unit.

3. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except, for the record required by section A.III.1.c which shall be maintained for the life of the emissions unit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall submit a written deviation (excursion) report when the maximum true vapor pressure of the material stored in this storage vessel is greater than or equal to 76.6 kPa (0.754 psia).

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T139 is a 595.24 barrel fixed roof storage vessel identified as tank number PR-500685. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | OAC rule 3745-31-05(A)(3) (PTI 04-379) | See section A.I.2.c. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |
| | 40 CFR Part 60, Subpart Kb | See section A.III.1. |

**2. Additional Terms and Conditions**

2.a As specified under 40 CFR 63.640(n)(1), a Group 2 storage vessel that is part of an existing source and is also subject to the provisions of 40 CFR Part 60, Subpart Kb, is required to comply only with the requirements of 40 CFR Part 60, Subpart Kb.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

2.c The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(L) and 40 CFR Part 60, Subpart Kb.

#### II. Operational Restrictions

1. The permittee shall store only petroleum liquids with a maximum true vapor pressure less than 76.6 kPa (0.754 psia) in this emissions unit.

#### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records showing:

   a. the type of material stored within the storage vessel;

   b. the true vapor pressure of the stored material at maximum storage temperature; and

   c. the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel.

2. The permittee shall maintain records of the actual annual throughput of each liquid stored in this emissions unit.

3. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except, for the record required by section A.III.1.c which shall be maintained for the life of the emissions unit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall submit a written deviation (excursion) report when the maximum true vapor pressure of the material stored in this storage vessel is greater than or equal to 76.6 kPa (0.754 psia).

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T164 is a 10,110.16 barrel fixed roof storage vessel with a closed vent system controlled by the West Acid Gas Flare (emissions unit P001). The tank is identified as tank number PR-500295 and is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | OAC rule 3745-31-05(A)(3) (PTI 04-708) | 0.73 ton per year volatile organic compounds (VOC) |
| | | See section A.I.2.c. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |
| | 40 CFR Part 60, Subpart Kb | See sections A.I.2.d and A.I.2.e. |

**2. Additional Terms and Conditions**

2.a As specified under 40 CFR 63.640(n)(1), a Group 1 or Group 2 storage vessel that is subject to the provisions of 40 CFR Part 60, Subpart Kb, is required to comply only with the requirements of 40 CFR Part 60, Subpart Kb.

2.b The requirements of this rule are less stringent than the requirements established by OAC rule 3745-31-05(A)(3).

2.c The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart Kb.

2.d This emissions unit shall be equipped with a closed vent system controlled by the West Acid Gas Flare (emissions unit P001) meeting the requirements of 40 CFR 60.18.

2.e The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in 40 CFR 60.485(b) of Subpart VV.

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of all periods of operation during which the West Acid Gas Flare pilot flame is absent.

2. The permittee shall maintain records showing:

   a. the type of material stored within the storage vessel;

   b. the true vapor pressure of the stored material at maximum storage temperature; and

   c. the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel.

3. The permittee shall maintain records of the actual annual throughput of materials stored in this emissions unit and calculate the annual emissions from this emissions unit according to section A.V.1.b.

4. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except, for the record required by section A.III.2.c which shall be maintained for the life of the emissions unit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall submit a written semiannual deviation (excursion) report to the Toledo Division of Environmental Services of all periods recorded under section A.III.1 in which the pilot flame was absent. This report shall be submitted by January 31 and July 31 of each year for the previous 6 calendar months.

2. The permittee shall submit a written deviation (excursion) report when the annual VOC emissions exceed 0.73 ton per year. This report shall be submitted by January 31 of each year for the previous calendar year.

3. If no deviations occurred during the 6 month period under section A.IV.1 or the annual period under section A.IV.2, the permittee shall submit a report which states that no deviations occurred during that period.

## V. Testing Requirements

1. Compliance with the applicable emission control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

   a. Emission Limitation:

      The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in 40 CFR 60.485(b) of Subpart VV.

      Applicable Compliance Method:

      Compliance shall be demonstrated using the procedures described under 40 CFR 60.485(b)(1).

   b. Emission Limitation:

      0.73 ton per year VOC

      Applicable Compliance Method:

      Compliance shall be demonstrated using the latest version of Tanks computer software or the latest emission factors from Section 7of AP-42, records required by section A.III of the terms and conditions for this emissions unit, and an estimated flare control efficiency of 98 percent.

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **T166**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T166 is a 16,883.35 barrel external roof storage vessel with dual seals. The tank is identified as tank number PR-500014 and is currently classified as a Group 1 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(Z) | See section A.I.2.b. |
| | OAC rule 3745-31-05(A)(3) (PTI 04-770) | See sections A.I.2.c and A.I.2.d. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |
| | 40 CFR Part 60, Subpart Kb | See section A.II.1. |
| | 40 CFR Part 60, Subpart QQQ | See section A.II.2. |

**2. Additional Terms and Conditions**

2.a As specified under 40 CFR 63.640(n)(1), a Group 1 or Group 2 storage vessel that is subject to the provisions of 40 CFR Part 60, Subpart Kb, is required to comply only with the requirements of 40 CFR Part 60, Subpart Kb, except as provided in 40 CFR 63.640(n)(8).

2.b The requirements of this rule are less stringent than the requirements established by OAC rule 3745-31-05(A)(3).

2.c The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart Kb.

2.d The maximum controlled emissions were estimated by BP to be 3 x $10^{-5}$ ton per year VOC emissions. No emission limitation was established in PTI 04-770 because the VOC emissions were considered negligible.

#### II. Operational Restrictions

1. The external floating roof must meet the following specifications:

a. The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.

i. The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in section A.III.7, the seal shall completely cover the annular space between the edge of the floating roof and tank wall.

ii. The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as otherwise allowed in section A.III.7. This emissions unit is exempt from the secondary seal gap requirement during the gap measurements for the primary seal required by section A.III.4.

b. Except for automatic bleeder vents and rim space vents, each opening in a non-contact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains and leg sleeves, each opening in the roof is to be equipped with a gasketed seal, or lid that is to be maintained in a closed position at all times (i.e., no visible gap), except when the device is in actual use. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports. Rim vents are to be set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Automatic bleeder vents and rim space vents are to be gasketed. Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.

c. The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible.

2. Each tank drain shall be equipped with water seal controls.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records showing:

a. the type of material stored within the storage vessel;

b. the true vapor pressure of the stored material at maximum storage temperature; and

c. the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel.

2. The permittee shall maintain records of the actual annual throughput of materials stored in this emissions unit and calculate the annual emissions from this emissions unit according to section A.V.1.a.

3. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except, for the record required by section A.III.1.c which shall be maintained for the life of the emissions unit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

4. The permittee shall determine the gap areas and maximum gap widths, between the primary seal and the wall of the storage vessel, and between the secondary seal and the wall of the storage vessel according to the following frequency.

   a. Measurements of gaps between the tank wall and the primary seal (seal gaps) shall be performed within 60 days of the initial fill with volatile organic liquid (VOL) and at least once every 5 years thereafter.

   b. Measurements of gaps between the tank wall and the secondary seal shall be performed within 60 days of the initial fill with VOL and at least once per year.

   c. If any source ceases to store VOL for a period of 1 year or more, subsequent introduction of VOL into the vessel shall be considered an initial fill for the purposes of sections A.III.4.a and A.III.4.b.

5. The permittee shall determine the gap widths and areas in the primary and secondary seals individually by the following procedures:

   a. Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports.

   b. Measure seal gaps around the entire circumference of the tank in each place where a 0.32 cm diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel and measure the circumferential distance of each such location.

   c. The total surface area of each gap described in section A.III.5.b shall be determined by using probes of various widths to measure accurately the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.

6. The permittee shall add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in section A.III.7.

7. The permittee shall make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in sections A.III.7.a and A.III.7.b:

   a. The accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 $cm^2$ per meter of tank diameter, and the width of any portion of any gap shall not exceed 3.81cm.

      i. One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61cm above the stored liquid surface.

      ii. There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

   b. The secondary seal is to meet the following requirements:

      i. The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in section A.III.7.c.

      ii. The accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 $cm^2$ per meter of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm.

      iii. There are to be no holes, tears, or other openings in the seal or seal fabric.

   c. If a failure that is detected during inspections required in section A.III.4 cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, the permittee may utilize up to two extensions of up to 30 additional calendar days each. The permittee is not required to provide a request for the extension.

8. The permittee shall notify the Administrator 30 days in advance of any gap measurements required by section A.III.4 to afford the Administrator the opportunity to have an observer present.

9. The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and the fittings each time the vessel is emptied and degassed.

   a. If the external floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or seal fabric, the permittee shall repair the items as

necessary so that none of the conditions specified in this paragraph exist before filling or re-filling the storage vessel with VOL.

b. For all inspections required by section A.III.9, the permittee shall notify the Administrator in writing at least 30 days prior to filling or re-filling of each storage vessel to afford the Administrator the opportunity to inspect the storage vessel prior to re-filling. If the inspection required in section A.III.9 is not planned and the permittee could not have known about the inspection 30 days in advance of refilling the tank, the permittee shall notify the Administrator at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternately, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling.

10. If the permittee determines that it is unsafe to perform the seal gap measurements required by section A.III.4 because the roof appears to be structurally unsound and poses an imminent danger to inspecting personnel, the permittee shall comply with either of the following requirements:

a. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

b. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

11. Each drain in active service shall be checked by visual or physical inspection initially and monthly thereafter for indications of low water levels or other conditions that would reduce the effectiveness of the water seal controls.

12. Whenever low water levels or missing or improperly installed caps or plugs are identified, water shall be added or first efforts at repair shall be made as soon as possible, but not later than 24 hours after detection.

## IV. Reporting Requirements

1. The permittee shall submit a written semiannual deviation (excursion) report to the Toledo Division of Environmental Services of all periods when repairs required under section A.III.12 were not made within 24 hours after detection. If no deviations occurred during the annual period under A.IV.1, the permittee shall submit a report which states

that no deviations occurred during that period. This report shall be submitted by January 31 and July 31of each year for the previous 6 calendar months, or, these reports can be submitted as part of the Periodic Reports.

2. The permittee shall meet the following requirements.

   a. Within 60 days of performing the initial fill seal gap measurement required by section A.III.4, furnish the Administrator with a report that contains:

      i. The date of measurement;

      ii. The raw data obtained in the measurement;

      iii. The calculations described in sections A.III.5 and A.III.6.

   b. Keep a record of each gap measurement performed as required by section A.III. Each record shall identify the storage vessel in which the measurement was performed and shall contain:

      i. The date of measurement;

      ii. The raw data obtained in the measurement;

      iii. The calculations described in sections A.III.5 and A.III.6.

   c. After each seal gap measurement that detects gaps exceeding the limitations specified by section A.III.7, submit a report to the Administrator as part of the next Periodic Report required by 40 CFR Part 63. The report will identify the vessel and contain the information specified in sections A.IV.3.a.i through A.IV.3.a.iii, the date the vessel was emptied or the repairs made, and date of repair.

3. If an extension is utilized under section A.III.7.c, the permittee shall, in the next periodic report, identify the vessel, provide the information in section A.IV.4.a below, and describe the nature and date of repair made or provide the date the storage vessel was emptied.

   a. A demonstration of unavailability of alternate storage capacity and a specification of a schedule that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

Emissions Unit ID: **T166**

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

Emissions Unit ID: **T167**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T167 is a 16,866.73 barrel external roof storage vessel with dual seals. The tank is identified as tank number PR-500015 and is currently classified as a Group 1 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(Z) | See section A.I.2.b. |
| | OAC rule 3745-31-05(A)(3) (PTI 04-770) | See sections A.I.2.c and A.I.2.d. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |
| | 40 CFR Part 60, Subpart Kb | See section A.II.1. |
| | 40 CFR Part 60, Subpart QQQ | See section A.II.2. |

**2. Additional Terms and Conditions**

2.a As specified under 40 CFR 63.640(n)(1), a Group 1 or Group 2 storage vessel that is subject to the provisions of 40 CFR Part 60, Subpart Kb, is required to comply only with the requirements of 40 CFR Part 60, Subpart Kb, except as provided in 40 CFR 63.640(n)(8).

2.b The requirements of this rule are less stringent than the requirements established by OAC rule 3745-31-05(A)(3).

2.c The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart Kb.

2.d The maximum controlled emissions were estimated by BP to be 3 x $10^{-5}$ ton per year VOC emissions. No emission limitation was established in PTI 04-770 because the VOC emissions were considered negligible.

#### II. Operational Restrictions

1. The external floating roof must meet the following specifications:

a. The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.

i. The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in section A.III.7, the seal shall completely cover the annular space between the edge of the floating roof and tank wall.

ii. The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as otherwise allowed in section A.III.7. This emissions unit is exempt from the secondary seal gap requirement during the gap measurements for the primary seal required by section A.III.4.

b. Except for automatic bleeder vents and rim space vents, each opening in a non-contact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains and leg sleeves, each opening in the roof is to be equipped with a gasketed seal, or lid that is to be maintained in a closed position at all times (i.e., no visible gap), except when the device is in actual use. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports. Rim vents are to be set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Automatic bleeder vents and rim space vents are to be gasketed. Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.

c. The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible.

2. Each tank drain shall be equipped with water seal controls.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records showing:

a. the type of material stored within the storage vessel;

b. the true vapor pressure of the stored material at maximum storage temperature; and

c. the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel.

2. The permittee shall maintain records of the actual annual throughput of materials stored in this emissions unit and calculate the annual emissions from this emissions unit according to section A.V.1.a.

3. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except, for the record required by section A.III.1.c which shall be maintained for the life of the emissions unit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

4. The permittee shall determine the gap areas and maximum gap widths, between the primary seal and the wall of the storage vessel, and between the secondary seal and the wall of the storage vessel according to the following frequency.

   a. Measurements of gaps between the tank wall and the primary seal (seal gaps) shall be performed within 60 days of the initial fill with volatile organic liquid (VOL) and at least once every 5 years thereafter.

   b. Measurements of gaps between the tank wall and the secondary seal shall be performed within 60 days of the initial fill with VOL and at least once per year.

   c. If any source ceases to store VOL for a period of 1 year or more, subsequent introduction of VOL into the vessel shall be considered an initial fill for the purposes of sections A.III.4.a and A.III.4.b.

5. The permittee shall determine the gap widths and areas in the primary and secondary seals individually by the following procedures:

   a. Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports.

   b. Measure seal gaps around the entire circumference of the tank in each place where a 0.32 cm diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel and measure the circumferential distance of each such location.

   c. The total surface area of each gap described in section A.III.5.b shall be determined by using probes of various widths to measure accurately the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.

6. The permittee shall add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in section A.III.7.

7. The permittee shall make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in sections A.III.7.a and A.III.7.b:

   a. The accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 $cm^2$ per meter of tank diameter, and the width of any portion of any gap shall not exceed 3.81cm.

      i. One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61cm above the stored liquid surface.

      ii. There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

   b. The secondary seal is to meet the following requirements:

      i. The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in section A.III.7.c.

      ii. The accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 $cm^2$ per meter of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm.

      iii. There are to be no holes, tears, or other openings in the seal or seal fabric.

   c. If a failure that is detected during inspections required in section A.III.4 cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, the permittee may utilize up to two extensions of up to 30 additional calendar days each. The permittee is not required to provide a request for the extension.

8. The permittee shall notify the Administrator 30 days in advance of any gap measurements required by section A.III.4 to afford the Administrator the opportunity to have an observer present.

9. The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and the fittings each time the vessel is emptied and degassed.

   a. If the external floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or seal fabric, the permittee shall repair the items as

necessary so that none of the conditions specified in this paragraph exist before filling or re-filling the storage vessel with VOL.

b. For all inspections required by section A.III.9, the permittee shall notify the Administrator in writing at least 30 days prior to filling or re-filling of each storage vessel to afford the Administrator the opportunity to inspect the storage vessel prior to re-filling. If the inspection required in section A.III.9 is not planned and the permittee could not have known about the inspection 30 days in advance of refilling the tank, the permittee shall notify the Administrator at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternately, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling.

10. If the permittee determines that it is unsafe to perform the seal gap measurements required by section A.III.4 because the roof appears to be structurally unsound and poses an imminent danger to inspecting personnel, the permittee shall comply with either of the following requirements:

a. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

b. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

11. Each drain in active service shall be checked by visual or physical inspection initially and monthly thereafter for indications of low water levels or other conditions that would reduce the effectiveness of the water seal controls.

12. Whenever low water levels or missing or improperly installed caps or plugs are identified, water shall be added or first efforts at repair shall be made as soon as possible, but not later than 24 hours after detection.

## IV. Reporting Requirements

1. The permittee shall submit a written semiannual deviation (excursion) report to the Toledo Division of Environmental Services of all periods when repairs required under section A.III.12 were not made within 24 hours after detection. If no deviations occurred during the annual period under A.IV.1, the permittee shall submit a report which states

that no deviations occurred during that period. This report shall be submitted by January 31 and July 31of each year for the previous 6 calendar months, or, these reports can be submitted as part of the Periodic Reports.

2. The permittee shall meet the following requirements.

   a. Within 60 days of performing the initial fill seal gap measurement required by section A.III.4, furnish the Administrator with a report that contains:

      i. The date of measurement;

      ii. The raw data obtained in the measurement;

      iii. The calculations described in sections A.III.5 and A.III.6.

   b. Keep a record of each gap measurement performed as required by section A.III. Each record shall identify the storage vessel in which the measurement was performed and shall contain:

      i. The date of measurement;

      ii. The raw data obtained in the measurement;

      iii. The calculations described in sections A.III.5 and A.III.6.

   c. After each seal gap measurement that detects gaps exceeding the limitations specified by section A.III.7, submit a report to the Administrator as part of the next Periodic Report required by 40 CFR Part 63. The report will identify the vessel and contain the information specified in sections A.IV.3.a.i through A.IV.3.a.iii, the date the vessel was emptied or the repairs made, and date of repair.

3. If an extension is utilized under section A.III.7.c, the permittee shall, in the next periodic report, identify the vessel, provide the information in section A.IV.4.a below, and describe the nature and date of repair made or provide the date the storage vessel was emptied.

   a. A demonstration of unavailability of alternate storage capacity and a specification of a schedule that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

Emissions Unit ID: **T167**

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **T170**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T170 is a 10,065.33 barrel fixed roof storage vessel with a closed vent system controlled by the West Acid Gas Flare (emissions unit P001). The tank is identified as tank number PR-500294 and is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | OAC rule 3745-31-05(A)(3) (PTI 04-919 as modified on July 3, 1996) | 1.42 tons per year volatile organic compounds (VOC) |
| | | 0.14 ton per year sulfur dioxide ($SO_2$) |
| | | See section A.I.2.c. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |
| | 40 CFR Part 60, Subpart K | See section A.I.2.d. |

**2. Additional Terms and Conditionss**

2.a As specified under 40 CFR 63.640(n)(6), a Group 2 storage vessel that is is subject to the control requirements of 40 CFR Part 60, Subpart K, is required to comply only with the requirements of 40 CFR Part 60, Subpart K.

2.b The requirements of this rule are less stringent than the requirements established by OAC rule 3745-31-05(A)(3).

2.c The requirements of this rule also include compliance with the requirements of 40 CFR part 60, Subpart K.

2.d This emissions unit shall be equipped with a closed vent system controlled by the West Acid Gas Flare (emissions unit P001) meeting the requirements of 40 CFR 60.18.

#### II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of all periods of operation during which the West Acid Gas Flare pilot flame is absent.

2. The permittee shall maintain records showing:

   a. the type of material stored within the storage vessel; and

   b. the true vapor pressure of the stored material at maximum storage temperature.

3. The permittee shall maintain records of the actual annual throughput of materials stored in this emissions unit and calculate the annual emissions from this emissions unit according to sections A.V.1.a and A.V.1.b.

4. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall submit a written semiannual deviation (excursion) report to the Toledo Division of Environmental Services of all periods recorded under section A.III.1 in which the pilot flame was absent. This report shall be submitted by January 31 and July 31 of each year for the previous 6 calendar months.

2. The permittee shall submit a written deviation (excursion) report when the annual VOC emissions exceed 1.42 tons per year or the $SO_2$ emissions exceed 0.14 ton per year. This report shall be submitted by January 31 of each year for the previous calendar year.

3. If no deviations occurred during the 6 month period under section A.IV.1 or the annual period under section A.IV.2, the permittee shall submit a report which states that no deviations occurred during that period.

## V. Testing Requirements

1. Compliance with the applicable emission control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

   a. Emission Limitation:

      1.42 tons per year VOC

      Applicable Compliance Method:

Compliance shall be demonstrated using the latest version of Tanks computer software or the latest emission factors from Section 7 of AP-42, records required by section A.III of the terms and conditions for this emissions unit, and an estimated flare control efficiency of 98 percent.

b. Emission Limitation:

0.14 ton per year $SO_2$

Applicable Compliance Method:

Divide the uncontrolled VOC emissions in tons per year from section A.V.1.a by the molecular weight of the VOC vapor (46.6 tons/ton-mole) and multiply by the hydrogen sulfide concentration of 5 mole percent. Multiply the previous product by the molecular weight of sulfur dioxide (64) and divide by the molecular weight of hydrogen sulfide (34).

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **T174**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T174 is a 80,000 barrel external roof storage vessel with dual seals. The tank is identified as tank number PR-500770 and is currently classified as a Group 1 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(Z) | See section A.I.2.b. |
| | OAC rule 3745-31-05(A)(3) (PTI 04-1024) | 19 tons per year volatile organic compound (VOC) emissions |
| | | See section A.I.2.c. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |
| | 40 CFR Part 60, Subpart Kb | See section A.II.1. |

**2. Additional Terms and Conditions**

2.a As specified under 40 CFR 63.640(n)(1), a Group 1 or Group 2 storage vessel that is subject to the provisions of 40 CFR Part 60, Subpart Kb, is required to comply only with the requirements of 40 CFR Part 60, Subpart Kb, except as provided in 40 CFR 63.640(n)(8).

2.b The requirements of this rule are less stringent than the requirements established by OAC rule 3745-31-05(A)(3).

2.c The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart Kb.

#### II. Operational Restrictions

1. The external floating roof must meet the following specifications:

a. The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.

i. The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in section A.III.7, the seal shall completely cover the annular space between the edge of the floating roof and tank wall.

ii. The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as otherwise allowed in section A.III.7. This emissions unit is exempt from the secondary seal gap requirement during the gap measurements for the primary seal required by section A.III.4.

b. Except for automatic bleeder vents and rim space vents, each opening in a non-contact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains and leg sleeves, each opening in the roof is to be equipped with a gasketed seal, or lid that is to be maintained in a closed position at all times (i.e., no visible gap), except when the device is in actual use. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports. Rim vents are to be set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Automatic bleeder vents and rim space vents are to be gasketed. Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.

c. The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records showing:

   a. the type of material stored within the storage vessel;

   b. the true vapor pressure of the stored material at maximum storage temperature; and

   c. the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel.

2. The permittee shall maintain records of the actual annual throughput of materials stored in this emissions unit and calculate the annual emissions from this emissions unit according to section A.V.1.a.

3. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except, for the record required by section A.III.1.c which shall be maintained for the life of the emissions unit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

4. The permittee shall determine the gap areas and maximum gap widths, between the primary seal and the wall of the storage vessel, and between the secondary seal and the wall of the storage vessel according to the following frequency.

   a. Measurements of gaps between the tank wall and the primary seal (seal gaps) shall be performed within 60 days of the initial fill with volatile organic liquid (VOL) and at least once every 5 years thereafter.

   b. Measurements of gaps between the tank wall and the secondary seal shall be performed within 60 days of the initial fill with VOL and at least once per year.

   c. If any source ceases to store VOL for a period of 1 year or more, subsequent introduction of VOL into the vessel shall be considered an initial fill for the purposes of sections A.III.4.a and A.III.4.b.

5. The permittee shall determine the gap widths and areas in the primary and secondary seals individually by the following procedures:

   a. Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports.

   b. Measure seal gaps around the entire circumference of the tank in each place where a 0.32 cm diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel and measure the circumferential distance of each such location.

   c. The total surface area of each gap described in section A.III.5.b shall be determined by using probes of various widths to measure accurately the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.

6. The permittee shall add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in section A.III.7.

7. The permittee shall make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in sections A.III.7.a and A.III.7.b:

a. The accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 $cm^2$ per meter of tank diameter, and the width of any portion of any gap shall not exceed 3.81cm.

i. One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61cm above the stored liquid surface.

ii. There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

b. The secondary seal is to meet the following requirements:

i. The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in section A.III.7.c.

ii. The accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 $cm^2$ per meter of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm.

iii. There are to be no holes, tears, or other openings in the seal or seal fabric.

c. If a failure that is detected during inspections required in section A.III.4 cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, the permittee may utilize up to two extensions of up to 30 additional calendar days each. The permittee is not required to provide a request for the extension.

8. The permittee shall notify the Administrator 30 days in advance of any gap measurements required by section A.III.4 to afford the Administrator the opportunity to have an observer present.

9. The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and the fittings each time the vessel is emptied and degassed.

a. If the external floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or seal fabric, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or re-filling the storage vessel with VOL.

b. For all inspections required by section A.III.9, the permittee shall notify the Administrator in writing at least 30 days prior to filling or re-filling of each storage vessel to afford the Administrator the opportunity to inspect the storage vessel prior to re-filling. If the inspection required section A.III.9 is not planned and the permittee could not have known about the inspection 30 days in advance of refilling the tank, the permittee shall notify the Administrator at least 7 days

prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternately, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling.

10. If the permittee determines that it is unsafe to perform the seal gap measurements required by section A.III.4 because the roof appears to be structurally unsound and poses an imminent danger to inspecting personnel, the permittee shall comply with either of the following requirements:

    a. the permittee shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

    b. the permittee shall empty and remove the storage vessel from service no later than 45 calendar days after determining that the roof is unsafe. If the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

## IV. Reporting Requirements

1. The permittee shall submit a written deviation (excursion) report when the annual VOC emissions exceed 19 tons per year VOC.

2. If no deviations occurred during the annual period under section A.IV.1, the permittee shall submit a report which states that no deviations occurred during that period.

3. The permittee shall meet the following requirements.

    a. Within 60 days of performing the initial fill seal gap measurement required by section A.III.4, furnish the Administrator with a report that contains:

        i. the date of measurement;

        ii. the raw data obtained in the measurement; and

        iii. the calculations described in sections A.III.5 and A.III.6.

    b. Keep a record of each gap measurement performed as required by section A.III. Each record shall identify the storage vessel in which the measurement was performed and shall contain:

        i. the date of measurement;

ii. the raw data obtained in the measurement; and

iii. the calculations described in sections A.III.5 and A.III.6.

c. After each seal gap measurement that detects gaps exceeding the limitations specified by section A.III.7, submit a report to the Administrator as part of the next Periodic Report required by 40 CFR Part 63. The report will identify the vessel and contain the information specified in sections A.IV.3.a.i through A.IV.3.a.iii, the date the vessel was emptied or the repairs made, and date of repair.

4. If an extension is utilized under section A.III.7.c, the permittee shall, in the next periodic report, identify the vessel, provide the information in section A.IV.4.a below, and describe the nature and date of repair made or provide the date the storage vessel was emptied.

a. A demonstration of unavailability of alternate storage capacity and a specification of a schedule that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

## V. Testing Requirements

1. Compliance with the applicable emission control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

a. Emission Limitation:

19 tons per year VOC emissions

Applicable Compliance Method:

Compliance shall be demonstrated using the latest version of Tanks computer software or the latest emission factors from Section 7of AP-42 and records required by section A.III of the terms and conditions for this emissions unit.

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T175 is a 10,000 barrel fixed roof storage vessel identified as tank number PR-500091. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | OAC rule 3745-31-05(A)(3) (PTI 04-1044) | 17 tons per year VOC<br><br>See section A.I.2.c. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |
| | 40 CFR Part 60, Subpart Kb | See section A.III.1. |

**2. Additional Terms and Conditions**

2.a As specified under 40 CFR 63.640(n)(1), a Group 2 storage vessel that is part of an existing source and is also subject to the provisions of 40 CFR Part 60, Subpart Kb, is required to comply only with the requirements of 40 CFR Part 60, Subpart Kb.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

2.c The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(L) and 40 CFR Part 60, Subpart Kb.

#### II. Operational Restrictions

1. The permittee shall store only petroleum liquids with a maximum true vapor pressure less than 76.6 kPa (0.754 psia) in this emissions unit.

#### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records showing:

   a. the type of material stored within the storage vessel;

   b. the true vapor pressure of the stored material at maximum storage temperature; and

   c. the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel.

2. The permittee shall maintain records of the actual annual throughput of each liquid stored in this emissions unit.

3. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except, for the record required by section A.III.1.c which shall be maintained for the life of the emissions unit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall submit a written deviation (excursion) report when the maximum true vapor pressure of the material stored in this storage vessel is greater than or equal to 76.6 kPa (0.754 psia). This report shall be submitted within 30 days of occurrence.

2. The permittee shall submit a written deviation (excursion) report when the annual VOC emissions exceed 17 tons per year. This report shall be submitted by January 31 of each year for the previous calendar year.

## V. Testing Requirements

1. Compliance with the applicable emission control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

   a. Emission Limitation:

      17 tons per year VOC emissions

      Applicable Compliance Method:

      Compliance shall be demonstrated using the latest version of Tanks computer software or the latest emission factors from Section 7 of AP-42 and the records required by section A.III of the terms and conditions for this emissions unit.

## VI. Miscellaneous Requirements

Emissions Unit ID: **T175**

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **T176**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T176 is a 10,000 barrel fixed roof storage vessel identified as tank number PR-500091. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | exempt<br><br>See section A.I.2.b. |
| | OAC rule 3745-31-05(A)(3) (PTI 04-1044) | 17 tons per year volatile organic compounds (VOC)<br><br>See section A.I.2.c. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |
| | 40 CFR Part 60, Subpart Kb | See section A.III.1. |

**2. Additional Terms and Conditions**

2.a As specified under 40 CFR 63.640(n)(1), a Group 2 storage vessel that is part of an existing source and is also subject to the provisions of 40 CFR Part 60, Subpart Kb, is required to comply only with the requirements of 40 CFR Part 60, Subpart Kb.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

2.c The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(L) and 40 CFR Part 60, Subpart Kb.

#### II. Operational Restrictions

1. The permittee shall store only petroleum liquids with a maximum true vapor pressure less than 76.6 kPa (0.754 psia) in this emissions unit.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records showing:

   a. the type of material stored within the storage vessel;

   b. the true vapor pressure of the stored material at maximum storage temperature; and

   c. the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel.

2. The permittee shall maintain records of the actual annual throughput of each liquid stored in this emissions unit.

3. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except, for the record required by section A.III.1.c which shall be maintained for the life of the emissions unit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall submit a written deviation (excursion) report when the maximum true vapor pressure of the material stored in this storage vessel is greater than or equal to 76.6 kPa (0.754 psia). This report shall be submitted within 30 days of occurrence.

2. The permittee shall submit a written deviation (excursion) report when the annual VOC emissions exceed 17 tons per year VOC. This report shall be submitted by January 31 of each year for the previous calendar year.

## V. Testing Requirements

1. Compliance with the applicable emission control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

   a. Emission Limitation:
   17 tons per year VOC emissions
   Applicable Compliance Method:

   Compliance shall be demonstrated using the latest version of Tanks computer software or the latest emission factors from Section 7 of AP-42 and the records required by section A.III of the terms and conditions for this emissions unit.

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Recordkeeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| T177 is a 30,000 barrel storage tank identified as PR-500776. The tank has an internal floating roof with dual seals. It is currently operated as a Group 1 storage vessel under 40 CFR Part 63, Subpart CC. | 40 CFR Part 63, Subpart CC | See sections A.I.2.g through A.I.2.j. |
| | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | OAC rule 3745-31-05(A)(3) (PTI 04-1066) | 9.04 tons per year volatile organic compounds (VOC) |
| | | See sections A.I.2.c through A.I.2.f. |
| | 40 CFR Part 60, Subpart Ka | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a As specified under 40 CFR 63.640(n)(5), a Group 1 storage vessel that is also subject to the provisions of 40 CFR Part 60, Subpart K or Ka is required to only comply with the provisions of 40 CFR Part 63, Subpart CC.

2.b The requirements specified by this rule are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3).

2.c The requirements of this rule also include compliance with OAC rule 3745-31-05(A)(3) and 40 CFR Part 60, Subpart Ka.

2.d The fixed roof storage tank shall be equipped with an internal floating roof.

2.e The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

2.f All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

2.g Each permittee of a Group 1 storage vessel subject to 40 CFR Part 63, Subpart CC shall comply with the requirements of 40 CFR 63.119 through 63.121 (Subpart G) except as provided in 40 CFR 63.646(b) through 63.646(l) of Subpart CC.

2.h Failure to perform inspections and monitoring required by 40 CFR Part 63, Subpart CC shall constitute a violation of the applicable standard of this subpart.

2.i The permittee shall comply with the requirements specified in 40 CFR 63.119(b)(1), (2) and (3) [See section A.II.].

2.j To demonstrate compliance with 40 CFR 63.119(b) of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements of 40 CFR 63.120(a) of Subpart G [See section A.III.].

## II. Operational Restrictions

1. [40 CFR 63.646(f) and (f)(1)-(3)]
The following paragraphs apply to Group 1 storage vessels at existing sources:

a. If a cover or lid is installed on an opening on a floating roof, the cover or lid shall remain closed except when the cover or lid must be open for access.

b. Rim space vents are to be set to open only when the floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

c. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

2. [40 CFR 63.119(b)]
[Note: The intent of 40 CFR 63.119(b)(1) and (b)(2) of subpart G is to avoid having a vapor space between the floating roof and the stored liquid for extended periods. Storage vessels may be emptied for purposes such as routine storage vessel maintenance, inspections, petroleum liquid deliveries, or transfer operations. Storage vessels where liquid is left on walls, as bottom clingage, or in pools due to floor irregularity are considered completely empty.]

a. [40 CFR 63.119(b)(1)]
The internal floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified below:

i. during the initial fill;

ii. after the vessel has been completely emptied and degassed; and

iii. when the vessel is completely emptied before being subsequently refilled.

b. [40 CFR 63.119(b)(2)]

When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

c. [40 CFR 63.119(b)(3)]
Each internal floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. Except as provided in paragraph iv. of this section, the closure device shall consist of one of the devices listed in paragraphs i., ii., or iii. of this section.

i. A liquid-mounted seal as defined in 40 CFR 63.111.

ii. A metallic shoe seal as defined in 40 CFR 63.111.

iii. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor- mounted, but both must be continuous seals.

iv. If the internal floating roof is equipped with a vapor-mounted seal as of July 15, 1994, the requirement for one of the seal options specified in paragraphs i., ii., and iii. of this section does not apply until the earlier of the dates: the next time the storage vessel is emptied and degassed or no later than 10 years after August 18, 1995.

## III. Monitoring and/or Record Keeping Requirements

1. [OAC 3745-21-09(L)]
The permittee shall maintain records of the following information:

a. the types of petroleum liquids stored in the tank; and

b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute.

2. [40 CFR 63.642(e)]
The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

3. [40 CFR 63.646(b)]
As used in 40 CFR Part 63, Subpart CC, all terms not defined in 40 CFR 63.641 shall have the meaning given them in 40 CFR Part 63, Subparts A or G. The Group 1 storage vessel definition presented in 40 CFR 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of 40 CFR 63.119 of Subpart G.

a. [40 CFR 63.646(b)(1)]
The permittee may use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

b. [40 CFR 63.646(b)(2)]
When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage vessel at an existing sources or above or below 2 percent for a storage vessel at a new sources, Method 18 of 40 CFR Part 60, Appendix A shall be used.

4. [40 CFR 63.120(a)] INSPECTIONS
To demonstrate compliance with 40 CFR 63.119(b) [See section A.I.2.f.] of Subpart G (storage vessel equipped with a fixed roof and internal floating roof), the permittee shall comply with the requirements in the paragraphs a., b. and c. of this section.

a. [40 CFR 63.120(a)(1)]
The permittee shall visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), according to the schedule specified in 40 CFR 63.120(a)(3), see paragraph b. of this section.

b. [40 CFR 63.120(a)(3); (a)(3)(i) - (a)(3)(iii)]
For vessels equipped with a double-seal system, the permittee shall perform either the inspection required by paragraph i. of this section or the inspections required by both paragraphs ii. and iii. of this section.

i. Visually inspect the internal floating roof , the primary seal, and secondary seal each time the storage vessel is emptied and degassed and at least once every 5 years after the first degassing and cleaning activity after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

ii. The permittee shall visually inspect the internal floating roof and the secondary seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill, or at least once every 12 months after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

iii. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal each time the vessel is emptied and degassed and at least once every 10 years after the first degassing and cleaning activity after the compliance date specified in 40 CFR 63.640(h) through (m) of Subpart CC.

[Note: The permittee is not required to comply with the provisions for gaskets, slotted membranes and sleeve seals in 40 CFR 63.120(a)(3). This exemption is found under 40 CFR 63.646(e).]

c. [40 CFR 63.120(a)(4)]

If during the inspections required by b.ii of this section, the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached; or there are holes or tears in the seal fabric; or there are visible gaps between the seal and the wall of the storage vessel, the permittee shall repair the items or empty and remove the storage vessel from service within 45 calendar days. If a failure that is detected during inspections required by paragraph b.ii of this section cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as practical.

d. [40 CFR 63.120(a)(7)]
If during the inspections required by 40 CFR 63.120(a)(3)(i) or (a)(3)(iii) [see paragraph b. of this section], the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with organic HAP.

5. [40 CFR 63.646(e)]
When complying with the inspection requirements of 40 CFR 63.120 of Subpart G, the permittees of storage vessels at existing sources subject to 40 CFR Part 63, Subpart CC, are not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

6. [40 CFR 63.654(i) references 63.123] STORAGE VESSEL RECORD KEEPING

a. [40 CFR 63.123(a)]
The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept as long as the storage vessel retains Group 1 status and is in operation.

b. [40 CFR 63.123(c)]
The permittee shall keep a record that each inspection required by 40 CFR 63.120(a) [See section A.III.] was performed.

c. [40 CFR 63.123(g)]
The permittee who elects to utilize an extension in emptying a storage vessel in accordance with 40 CFR 63.120(a)(4) [See section A.III.] shall keep in a readily accessible location, the documentation specified in 63.120(a)(4) [See section A.III.] as applicable.

d. [40 CFR 63.654(i)(1)(i)]
Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

e. [40 CFR 63.654(i)(1)(iv)]
If a storage vessel is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

7. The permittee shall maintain records showing:

a. the type of material stored within the storage vessel;

b. the true vapor pressure of the stored material at maximum storage temperature; and

8. The permittee shall maintain records of the actual annual throughput of materials stored in this emissions unit and calculate the annual emissions from this emissions unit according to section A.V.1.a.

## IV. Reporting Requirements

1. [40 CFR 63.642(f)]
All reports required in reporting for 40 CFR Part 63, Subpart CC, shall be sent to the Administrator and the Toledo Division of Environmental Services at the addresses listed below. If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

Administrator
c/o Bob Hodanbosi
Ohio EPA
Division of Air Pollution Control
Lazarus Government Center
PO Box 1049
Columbus, OH 43216-1049

Toledo Division of Environmental Services
Air Section
348 South Erie Street
Toledo, Ohio 43602-1633

2. [40 CFR 63.646(l)]
The State or local permitting authority can waive the notification requirements of 40 CFR 63.120(a)(5), 63.120(a)(6), 63.120(b)(10)(ii), and 63.120(b)(10)(iii) for all or some storage vessels at petroleum refineries subject to this subpart. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notifications in 40 CFR 63.120(a)(6) or 63.120(b)(10)(iii) for all storage vessels at a refinery or for individual storage vessels on a case-by-case basis.

3. [40 CFR 63.654(g)]
The permittee shall submit Periodic Reports no later than 60 days after the end of each 6-month period when any of the compliance exceptions specified in paragraphs a. and b. below, occur. The first 6-month period shall begin on the date the Notification of Compliance Status report is required to be submitted. (Existing Group 1 storage vessels shall be in compliance at the first degassing and cleaning activity after August 18, 1998, or by August 18, 2005, whichever is first [40 CFR 63.640(h)(4)]). A Periodic Report is not required if none of the compliance exceptions specified in paragraphs a. and b. occurred during the 6-month period unless emissions averaging

is utilized. The permittee may submit reports required by other regulations in place of or as part of the Periodic Report required by this paragraph if the reports contain the information required by paragraphs a. and b. below.

a. [40 CFR 63.654(g)(1)]
For storage vessels, Periodic Reports shall include the information specified for Periodic Reports in paragraph b., except that information related to gaskets, slotted membranes, and sleeve seals is not required for storage vessels that are part of an existing source.

b. [40 CFR 63.654(g)(2) and (2)(i)(A) through (2)(i)(C)]
The permittee shall submit the results of each inspection conducted in accordance with 40 CFR 63.120(a) of subpart G [See section A.III.] in which a failure is detected in the control equipment. For vessels for which annual inspections are required under 40 CFR 63.120(a)(3)(ii) [See section A.III.], the specifications and requirements listed in paragraphs i. through iii. of this section apply.

i. A failure is defined as any time in which the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached from the internal floating roof; or there are holes, and date the repair was made or the date the storage vessel was emptied.

ii. Except as provided in paragraph iii. of this section, each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made or the date the storage vessel was emptied.

iii. If an extension is utilized in accordance with 40 CFR 63.120(a)(4) of Subpart G, [See section A.III.], the permittee shall, in the next Periodic Report, identify the vessel; include the documentation specified in 40 CFR 63.120(a)(4) of Subpart G, [See section A.III.]; and describe the date the storage vessel was emptied and the nature of and date the repair was made.

c. [40 CFR 63.654(g)(2)(ii) and (2)(ii)(A) through (2)(ii)(B)]
For vessels for which inspections are required under 40 CFR 63.120(a)(3)(i) or (a)(3)(iii) [See section A.III.] (i.e., internal inspections), the specifications and requirements listed in paragraphs i. through ii. of this section apply.

i. A failure is defined as any time in which the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal (if one has been installed) has holes, tears, or other openings in the seal or the seal fabric.

ii. Each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the

failure. The Periodic Report shall also describe the nature of and date the repair was made.

4. [40 CFR 63.654(h)(2) and (h)(2)(i)]
Reports shall be submitted as specified in Subpart A of 40 CFR Part 63 and for storage vessels, notifications of inspections as specified in the following paragraphs, a. through c. In order to afford the Administrator the opportunity to have an observer present, the permittee shall notify the Administrator of the refilling of each Group 1 storage vessel that has been emptied and degassed.

   a. [40 CFR 63.654(h)(2)(i)(A)]
   Except as provided in paragraphs b. and c. of this section, the permittee shall notify the Administrator in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAP's to afford the Administrator the opportunity to inspect the storage vessel prior to refilling.

   b. [40 CFR 63.654(h)(2)(i)(B)]
   Except as provided in paragraph c. of this section, if the internal inspection required by 40 CFR 63.120(a)(3), is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP's, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. This notification, including the written documentation, may also be made in writing and sent so that it is received by the Administrator at least 7 calendar days prior to the refilling.

   c. [40 CFR 63.654(h)(2)(i)(C)]
   The State or local permitting authority can waive the notification requirements of paragraph a. and/or b. of this section for all or some storage vessels at petroleum refineries subject to 40 CFR Part 63 subpart CC. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notification required by paragraph a. of this section or sooner than 7 days after submitting the notification required by paragraph b. of this section for all storage vessels, or for individual storage vessels on a case-by-case basis.

5. The permittee shall submit a written deviation (excursion) report to the Toledo Division of Environmental Services when the annual VOC emissions exceed 9.04 tons per year VOC. If no deviations occurred during the annual period, then the permittee shall submit a report which states that no deviations occurred during that period. This report shall be submitted by January 31 of each year, or, it may be included as part of the Periodic Report.

## V. Testing Requirements

1. Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

   a. Emission Limitation:

9.04 tons per year VOC emissions

Applicable Compliance Method:

Compliance shall be demonstrated using the latest version of Tanks computer software or the latest emission factors from Section 7of AP-42 and records required by section A.III of the terms and conditions for this emissions unit.

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

## I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2.** **Additional Terms and Conditions**

None

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

None

## IV. Reporting Requirements

None

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Z001 - Isocracker 2 controlled by West Flare: This process cracks heavy feed stock to gasoline and kerosene. | OAC rule 3745-21-09(T) | See section A.I.2.a. |
| | 40 CFR Part 63, Subpart A | See sections A.I.2.b and A.I.2.c. |
| | 40 CFR Part 63, Subpart CC<br>40 CFR 63.648 | See sections A.I.2.c and A.I.2.d. |
| | miscellaneous process vents<br>40 CFR Part 63, Subpart CC | See section A.I.2.g. |

**2. Additional Terms and Conditions**

2.a Refer to Part II of this permit for the state requirements for equipment leaks found in sections A.I.2, A.II, A.III, A.IV, and A.V, referencing OAC rule 3745-21-09(T).

2.b 40 CFR Part 63, Subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 63.

2.c Table 6 of 40 CFR Part 63, Subpart CC specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.d Refer to Part II of this permit for the applicable equipment leak provisions found in sections A.I.2, A.II, A.III, A.IV, and A.V, referencing 40 CFR Part 60, Subpart VV.

2.g Refer to Part II of this permit for the applicable monitoring, record keeping, reporting, and testing requirements for refinery flares found in sections A.I, A.II, A.III, A.IV, and A.V.

## II. Operational Restrictions

1. See the applicable sections in Part II for equipment leaks in A.II, referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. See the applicable sections in Part II for miscellaneous process vents in A.II, referencing 40 CFR Part 63, Subpart CC.

3. This emissions unit shall be vented to a flare that complies with the requirements of OAC rule 3745-21-09(DD)(10)(d).

## III. Monitoring and/or Record Keeping Requirements

1. See the applicable sections in Part II for equipment leaks in A.III, referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. See the applicable sections in Part II for miscellaneous process vents in A.III, referencing 40 CFR Part 63, Subpart CC.

3. See Part II of this permit for the applicable monitoring and record keeping requirements for refinery flares found in section A.III.

## IV. Reporting Requirements

1. See the applicable sections in Part II for equipment leaks in A.IV, referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. See the applicable sections in Part II for miscellaneous process vents in A.II, referencing 40 CFR Part 63, Subpart CC.

3. See Part II of this permit for the applicable reporting requirements for refinery flares found in section A.IV.

## V. Testing Requirements

1. See the applicable sections in Part II for equipment leaks in A.V, referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. See the applicable sections in Part II for miscellaneous process vents in A.II, referencing 40 CFR Part 63, Subpart CC.

3. See Part II of this permit for the applicable testing requirements for refinery flares found in section A.V.

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Z002 - Hydrogen Plant: This process produces hydrogen from fuel gas | OAC rule 3745-21-09(T) | See section A.I.2.a. |
| | 40 CFR Part 63, Subpart A | See sections A.I.2.b and A.I.2.c. |
| | 40 CFR Part 63, Subpart CC<br>40 CFR 63.648 | See sections A.I.2.c and A.I.2.d. |

**2. Additional Terms and Conditions**

2.a Refer to Part II of this permit for the state requirements for equipment leaks found in sections A.I.2, A.II, A.III, A.IV, and A.V, referencing OAC rule 3745-21-09(T).

2.b 40 CFR Part 63, Subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 63.

2.c Table 6 of 40 CFR Part 63, Subpart CC specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.d Refer to Part II of this permit for the applicable equipment leak provisions found in sections A.I.2, A.II, A.III, A.IV, and A.V, referencing 40 CFR Part 60, Subpart VV.

#### II. Operational Restrictions

1. See the applicable sections in Part II for equipment leaks in A.II, referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. See the applicable sections in Part II for miscellaneous process vents in A.II, referencing 40 CFR Part 63, Subpart CC.

## III. Monitoring and/or Record Keeping Requirements

1. See the applicable sections in Part II for equipment leaks in A.III, referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

## IV. Reporting Requirements

1. See the applicable sections in Part II for equipment leaks in A.IV, referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

## V. Testing Requirements

1. See the applicable sections in Part II for equipment leaks in A.V, referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Z006 - Poly Plant controlled by the West Flare: This process absorbs $H_2S$ and salts from sour fuel gas. | OAC rule 3745-21-09(T) | See section A.I.2.a. |
| | 40 CFR Part 63, Subpart A | See sections A.I.2.b and A.I.2.c. |
| | 40 CFR Part 63, Subpart CC<br>40 CFR 63.648 | See sections A.I.2.c and A.I.2.d. |
| | miscellaneous process vents<br>40 CFR Part 63, Subpart CC | See section A.I.2.g. |
| | OAC rule 3745-21-09(UU)(1) | See section A.I.2.h. |

**2. Additional Terms and Conditions**

2.a Refer to Part II of this permit for the state requirements for equipment leaks found in sections A.I.2, A.II, A.III, A.IV, and A.V, referencing OAC rule 3745-21-09(T).

2.b 40 CFR Part 63, Subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 63.

2.c Table 6 of 40 CFR Part 63, Subpart CC specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.d Refer to Part II of this permit for the applicable equipment leak provisions found in sections A.I.2, A.II, A.III, A.IV, and A.V, referencing 40 CFR Part 60, Subpart VV.

2.g Refer to Part II of this permit for the applicable monitoring, record keeping, reporting and testing requirements for refinery flares found in sections A.I, A.II, A.III, A.IV, and A.V.

2.h All VOC emissions from the SPOP waterwash tower spentwash flash drum and the POLY waterwash tower spentwash flash drum shall be vented to a flare that complies with the requirements of OAC rule 3745-21-09(DD)(10)(d). See Part II, Sections I through V of this permit for the applicable monitoring, record keeping, reporting, and testing requirements for refinery flares.

## II. Operational Restrictions

1. See the applicable sections in Part II for equipment leaks in A.II, referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. See the applicable sections in Part II for miscellaneous process vents in A.II, referencing 40 CFR Part 63, Subpart CC.

## III. Monitoring and/or Record Keeping Requirements

1. See the applicable sections in Part II for equipment leaks in A.III, referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. See the applicable sections in Part II for miscellaneous process vents in A.III, referencing 40 CFR Part 63, Subpart CC.

## IV. Reporting Requirements

1. See the applicable sections in Part II for equipment leaks in A.IV, referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. See the applicable sections in Part II for miscellaneous process vents in A.II, referencing 40 CFR Part 63, Subpart CC.

## V. Testing Requirements

1. See the applicable sections in Part II for equipment leaks in A.V, referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. See the applicable sections in Part II for miscellaneous process vents in A.II, referencing 40 CFR Part 63, Subpart CC.

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

Emissions Unit ID: **Z007**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Z007 is a 23,376 gallon fixed roof storage vessel identified as tank number PR-500162. | OAC rule 3745-21-09(L) | exempt<br><br>See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The design storage capacity of this storage vessel is less than 177 cubic meters (46, 763 gallons) and is defined as a Group 2 storage vessel under 40 CFR 63.641. Therefore, it is exempt from the requirements of 40 CFR Part 63, Subpart CC.

2.b In accordance with OAC rule 3745-21-09(L)(2), this storage tank is exempt from the requirements of OAC rule 3745-21-09(L)(1) because the tank has a capacity of less than 40,000 gallons.

#### II. Operational Restrictions

None

#### III. Monitoring and/or Record Keeping Requirements

None

#### IV. Reporting Requirements

None

#### V. Testing Requirements

None

#### VI. Miscellaneous Requirements

Emissions Unit ID: **Z007**

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Z009 is a 997.36 barrel fixed roof storage vessel identified as tank number PR-500254. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

2. Additional Terms and Conditions

2.a The design storage capacity of this storage vessel is less than 177 cubic meters (46, 763 gallons) and is defined as a Group 2 storage vessel under 40 CFR 63.641. Therefore, it is exempt from the requirements of 40 CFR Part 63, Subpart CC.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

#### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the following information:

**a. the types of petroleum liquids stored in the tank; and**

**b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pounds per square inch absolute.**

**2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.**

## IV. Reporting Requirements

**1. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo local air agency within 30 days of becoming aware of the occurrence.**

## V. Testing Requirements

**None**

## VI. Miscellaneous Requirements

**None**

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.**

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

### III. Monitoring and/or Record Keeping Requirements

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**NonePart III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

## A. State and Federally Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements

and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Z008 is a 2,185.8 barrel fixed roof storage vessel identified as tank number PR-500253. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

## II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

2. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **Z011**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Z011 is a 2,185 barrel fixed roof storage vessel identified as tank number PR-500258. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

3. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

4. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **Z012**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Z012 is a 1000 barrel fixed roof storage vessel identified as tank number PR-500275. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The design storage capacity of this storage vessel is less than 177 cubic meters (46, 763 gallons) and is defined as a Group 2 storage vessel under 40 CFR 63.641. Therefore, it is exempt from the requirements of 40 CFR Part 63, Subpart CC.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

#### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the following information:

   a. the types of petroleum liquids stored in the tank; and

b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pounds per square inch absolute.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

1. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo local air agency within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **Z013**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Z013 is a 3,798 barrel fixed roof storage vessel identified as tank number PR-500599. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

5. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

6. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **Z014**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Z014 is a 997.1 barrel fixed roof storage vessel identified as tank number PR-500735. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

7. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

8. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **Z015**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Z015 is a 1,600 barrel fixed roof storage vessel identified as tank number PR-500736. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

9. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

10. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **Z017**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Z017 - Diesel Engine #1: Fire water pump powered by Cummins diesel engine with a maximum rated input capacity of 1.7 mmBtu/hr | OAC rule 3745-17-07(A)(1) | Visible particulate emissions from any stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average, except as specified by the rule. |
| | OAC rule 3745-17-11(B)(5)(a) | Particulate emissions from the engine's exhaust shall not exceed 0.310 pound per million Btu of actual heat input. |
| | OAC rule 3745-18-06(B) | exempt<br><br>See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a Stationary internal combustion engines which have rated heat input capacities equal to, or less than, ten million BTU per hour total rated capacity are exempt from OAC rule 3745-18-06(G).

#### II. Operational Restrictions

1. The permittee shall burn only diesel fuel oil in this emissions unit.

#### III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than diesel fuel, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

#### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than diesel fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

## V. Testing Requirements

1. Compliance with the emissions limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Particulate emissions from the engine's exhaust shall not exceed 0.310 pound per million Btu of actual heat input.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

b. Emission Limitation:

Visible particulate emissions from any stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average, except as specified by the rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **Z018**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Z018 - Diesel Engine #2: Fire water pump powered by Cummins diesel engine with a maximum rated input capacity of 1.7 mmBtu/hr | OAC rule 3745-17-07(A)(1) | Visible particulate emissions from any stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average, except as specified by the rule. |
| | OAC rule 3745-17-11(B)(5)(a) | Particulate emissions from the engine's exhaust shall not exceed 0.310 pound per million Btu of actual heat input. |
| | OAC rule 3745-18-06(B) | exempt<br><br>See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a Stationary internal combustion engines which have rated heat input capacities equal to, or less than, ten million BTU per hour total rated capacity are exempt from OAC rule 3745-18-06(G).

#### II. Operational Restrictions

1. The permittee shall burn only diesel fuel oil in this emissions unit.

#### III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than diesel fuel, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

#### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than diesel fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

## V. Testing Requirements

1. Compliance with the emissions limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

   Particulate emissions from the engine's exhaust shall not exceed 0.310 pound per million Btu of actual heat input.

   Applicable Compliance Method:

   If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

   b. Emission Limitation:

   Visible particulate emissions from any stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average, except as specified by the rule.

   Applicable Compliance Method:

   If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

Emissions Unit ID: **Z019**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Z019 is a 1,392 barrel fixed roof storage vessel identified as tank number PR-500237. It is classified as a Group 2 storage vessel pursuant to 40 CFR 63.641. | OAC rule 3745-21-09(L) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC | See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, unless such tank, is designed or equipped with vapor control equipment which is one of the following: an internal floating roof; or, alternative equivalent control for VOC emissions as may be approved by the Director of Ohio EPA.

#### II. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. The permittee shall keep copies of all applicable reports and records required by this permit for at least 5 years except as otherwise specified in this permit. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

## IV. Reporting Requirements

11. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Toledo Division of Environmental Services at least thirty (30) days prior to such a change in the storage vessel's group designation.

12. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Z032 - EPA and Coker Wet Gas Treater controlled by the West Flare: This process removes $H_2S$ from sour fuel gas. | OAC rule 3745-21-09(T) | See section A.I.2.a. |
| | 40 CFR Part 63, Subpart CC 40 CFR 63.640(d)(5) | See section A.I.2.b. |

**2. Additional Terms and Conditions**

2.a Refer to Part II of this permit for the state requirements for equipment leaks found in sections A.I.2, A.II, A.III, A.IV, and A.V, referencing OAC rule 3745-21-09(T).

2.b The affected source subject to 40 CFR Part 63, Subpart CC does not include emission points routed to a fuel gas system, as defined in 40 CFR 63.641. No testing, monitoring, record keeping, or reporting is required by 40 CFR Part 63, Subpart CC for refinery fuel gas systems or emission points routed to refinery fuel gas systems.

#### II. Operational Restrictions

1. See the applicable sections in Part II for equipment leaks in A.II, referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. See the applicable sections in Part II for miscellaneous process vents in A.II, referencing 40 CFR Part 63, Subpart CC.

3. This emissions unit shall be vented to a flare that complies with the requirements of OAC rule 3745-21-09(DD)(10)(d).

#### III. Monitoring and/or Record Keeping Requirements

1. See the applicable sections in Part II for equipment leaks in A.III, referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. See the applicable sections in Part II for miscellaneous process vents in A.III, referencing 40 CFR Part 63, Subpart CC.

3. See Part II of this permit for the applicable monitoring and record keeping requirements for refinery flares found in section A.III..

## IV. Reporting Requirements

1. See the applicable sections in Part II for equipment leaks in A.IV, referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. See the applicable sections in Part II for miscellaneous process vents in A.II, referencing 40 CFR Part 63, Subpart CC.

3. See Part II of this permit for the applicable reporting requirements for refinery flares found in section A.IV.

## V. Testing Requirements

1. See the applicable sections in Part II for equipment leaks in A.V, referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. See the applicable sections in Part II for miscellaneous process vents in A.II, referencing 40 CFR Part 63, Subpart CC.

3. See Part II of this permit for the applicable testing requirements for refinery flares found in section A.V.

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Z033 - East Side Amine Treater controlled by the West Flare: This process removes $H_2S$ from sour fuel gas. | OAC rule 3745-21-09(T) | See section A.I.2.a. |
| | 40 CFR Part 63, Subpart CC<br>40 CFR 63.640(d)(5) | See section A.I.2.b. |

**2. Additional Terms and Conditions**

2.a Refer to Part II of this permit for the state requirements for equipment leaks found in sections A.I.2, A.II, A.III, A.IV, and A.V, referencing OAC rule 3745-21-09(T).

2.b The affected source subject to 40 CFR Part 63, Subpart CC does not include emission points routed to a fuel gas system, as defined in 40 CFR 63.641. No testing, monitoring, record keeping, or reporting is required by 40 CFR Part 63, Subpart CC for refinery fuel gas systems or emission points routed to refinery fuel gas systems.

#### II. Operational Restrictions

1. See the applicable sections in Part II for equipment leaks in A.II, referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. See the applicable sections in Part II for miscellaneous process vents in A.II, referencing 40 CFR Part 63, Subpart CC.

3. This emissions unit shall be vented to a flare that complies with the requirements of OAC rule 3745-21-09(DD)(10)(d).

#### III. Monitoring and/or Record Keeping Requirements

1. See the applicable sections in Part II for equipment leaks in A.III, referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. See the applicable sections in Part II for miscellaneous process vents in A.III, referencing 40 CFR Part 63, Subpart CC.

3. See Part II of this permit for the applicable monitoring and record keeping requirements for refinery flares found in section A.III..

## IV. Reporting Requirements

1. See the applicable sections in Part II for equipment leaks in A.IV, referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. See the applicable sections in Part II for miscellaneous process vents in A.II, referencing 40 CFR Part 63, Subpart CC.

3. See Part II of this permit for the applicable reporting requirements for refinery flares found in section A.IV.

## V. Testing Requirements

1. See the applicable sections in Part II for equipment leaks in A.V, referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

2. See the applicable sections in Part II for miscellaneous process vents in A.II, referencing 40 CFR Part 63, Subpart CC.

3. See Part II of this permit for the applicable testing requirements for refinery flares found in section A.V.

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

Emissions Unit ID: **Z034**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Z034 - Specialty fuels loading rack with a maximum daily throughput less than 20,000 gallons per day | 40 CFR Part 63, Subpart R | See section A.I.2.a. |
| | OAC rule 3745-21-09(Q) | See sections A.I.2.a and A.II. |
| | OAC rule 3745-21-09(T) | See section A.I.2.b. |
| | 40 CFR Part 63, Subpart CC<br>40 CFR 63.648 | See sections A.I.2.c and A.I.2.d. |

**2. Additional Terms and Conditions**

2.a In accordance with 40 CFR Part 63, Subpart R and OAC rule 3745-21-09(Q), this source is exempt from the requirements of these regulations because the throughput capacity is equal to, or less than, 20,000 gallons (75,700 liters) per day.

2.b Refer to Part II of this permit for the state requirements for equipment leaks found in sections A.I.2, A.II, A.III, A.IV, and A.V, referencing OAC rule 3745-21-09(T).

2.c Table 6 of 40 CFR Part 63, Subpart CC specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.d Refer to Part II of this permit for the applicable equipment leak provisions found in sections A.I.2, A.II, A.III, A.IV, and A.V, referencing 40 CFR Part 60, Subpart VV.

#### II. Operational Restrictions

1. The maximum throughput of gasoline for this emissions unit shall not exceed 20,000 gallons (75, 700 liters) per day.

2. The gasoline supplied to this emissions unit shall come only from stationary storage tanks equipped with internal or external floating roofs.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain daily records of the gasoline throughput.

## IV. Reporting Requirements

1. If the daily records document a daily throughput greater than 20,000 gallons of gasoline, the permittee shall so notify the Toledo Division of Environmental Services within 30 days of becoming aware of the occurrence.

## V. Testing Requirements

1. Compliance with the throughput limitation in section A.II.1 of these terms and conditions shall be determined in accordance with the monitoring and record keeping requirements of section A.III.1.

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

## VI. Miscellaneous Requirements

None

Emissions Unit ID: **Z035**

## Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

### A. State and Federally Enforceable Section

#### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Z035 - Knock Motors: (4) Waukesha gasoline engines with a maximum rating of 15 hp each used to determine the octane rating of gasoline produced | OAC rule 3745-17-07(A)(1) | Visible particulate emissions from any stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average, except as specified by the rule. |
| | OAC rule 3745-17-11(B)(5)(a) | Particulate emissions from the engine's exhaust shall not exceed 0.310 pound per million Btu of actual heat input. |
| | OAC rule 3745-18-06(B) | exempt<br><br>See section A.I.2.a. |

**2. Additional Terms and Conditions**

2.a Stationary internal combustion engines which have rated heat input capacities equal to, or less than, ten million BTU per hour total rated capacity are exempt from OAC rule 3745-18-06(G).

#### II. Operational Restrictions

The permittee shall burn only gasoline in this emissions unit.

#### III. Monitoring and/or Recordkeeping Requirements

For each day during which the permittee burns a fuel other than gasoline, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

#### IV. Reporting Requirements

The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than gasoline was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

## V. Testing Requirements

1. Compliance with the emissions limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

   Particulate emissions from the engine's exhaust shall not exceed 0.310 pound per million Btu of actual heat input

   Applicable Compliance Method:

   If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

   b. Emission Limitation:

   Visible particulate emissions from any stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average, except as specified by the rule.

   Applicable Compliance Method:

   If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

## VI. Miscellaneous Requirements

None

## B. State Only Enforceable Section

### I. Applicable Emissions Limitations and/or Control Requirements

**1.** The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

**2. Additional Terms and Conditions**

None

### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

None

### IV. Reporting Requirements

None

### V. Testing Requirements

None

### VI. Miscellaneous Requirements

None