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

11/25/03

CERTIFIED MAIL

RE: Preliminary Proposed Title V
Chapter 3745-77 permit

03-02-02-0012
Premcor Refining Group
Tom L. Jettinghof
1150 South Metcalf Street
Lima, OH 45804

Dear Tom L. Jettinghof:

Enclosed is the Ohio EPA Preliminary Proposed Title V permit that was issued in draft form on 08/18/03. The comment period for the Draft permit has ended. We are now ready to submit this permit to USEPA for approval.

We are submitting this for your review and comment. If you do not agree with the Preliminary Proposed Title V permit as written, you now have the opportunity to raise your concerns. **In order to facilitate our review of all the comments or concerns you may have with the enclosed preliminary proposed permit, please provide a hand marked-up copy of the permit showing the changes you think are necessary, along with any additional summary comments, within fourteen (14) days from your receipt of this letter to:**

Ohio EPA, Division of Air Pollution Control
Jim Orlemann, Manager, Engineering Section
Preliminary Proposed Title V Permit Correspondence
122 South Front Street
Columbus, Ohio 43215

and

Northwest District Office
347 North Dunbridge Road
Bowling Green, OH 43402
(419) 352-8461

Also, if you believe that it is necessary to have an informal conference with us, then, as part of your written comments, you should request a conference concerning the written comments.

If comments are not submitted within fourteen (14) days of your receipt of this letter, we will forward the proposed permit to USEPA for approval. All comments received will be carefully considered before proceeding to the proposed permit.

Sincerely,

Michael W. Ahern

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

cc: Northwest District Office
File, DAPC PMU

State of Ohio Environmental Protection Agency

PRELIMINARY PROPOSED TITLE V PERMIT

Issue Date: 11/25/03	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: 03-02-02-0012 to:

Premcor Refining Group
1150 South Metcalf Street
Lima, OH 45804

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

B001 (Process Heater)
Refinery Fuel Gas Fired Vacuum Unit II heater (PR 175151)

B002 (Process Heaters)
Refinery Fuel Gas fired ISO Stabilizer/Splitter Heaters (PR 170003/PR 175155)

B003 (Process Heaters)
Refinery Fuel Gas fired ISO I & II Heaters (PR 175152/PR 175153)

B004 (Process Heater)
Refinery Fuel Gas fired Crude II Heater (PR 175150)

B005 (Process Heater)
Refinery Fuel Gas fired Reformate Splitter Reboiler (PR 175168)

B006 (Process Heaters)
Refinery Fuel Gas fired U/F PRE, 1, 2, & 3 Heater (PR 175156-175159)

B007 (Process Heater)
Refinery Fuel Gas fired Reformer Regenerator Heater (PR 175162)

B008 (Process Heater)
Refinery Fuel Gas fired HDS Heater (PR 175169)

B009 (Steam Generating Unit)
Refinery Fuel Gas fired Riley Boiler (PR 175071)

B016 (Process Heater)
Refinery Fuel Gas fired FCC furnace (PR 175025)

B018 (Process Heater)
Refinery Fuel Gas fired Trolumen furnace (PR 175009)

B022 (Process Heater)
Refinery Fuel Gas fired Hot Belt Oil Heater-Arom (PR 175102)

B023 (Process Heater)
Refinery Fuel Gas fired THDA Reactor Charge Heater (PR 175103)

B024 (Process Heater)
Refinery Fuel Gas fired Isomeriztion heater (PR 175110)

B026 (Steam Generating Unit)
Refinery Fuel Gas fired CE Power Boiler (PR 175007)

B027 (Process Heater)
Refinery Fuel Gas fired Coker Furnace (PR 170002)

F001 (Roadways)
Paved and Unpaved Roadways

J001 (Loading Rack)
Propylene Truck Loading/Unloading Facilities

J002 (Loading Rack)
Propylene Railcar Loading/Unloading Facilities

P002 (Process)
SRU MEA Unit: Gas Amine Contactor (PR 164171), LPG Amine Contactor (PR 164170), Amine Stripper (PR 164172)

P004 (Process)
Trolumen fume burner (PR 175011) with two oxidizer tanks (PR 100087/88)

P005 (Process)
Two coker drums (PR164237/164238) and distillation column (PR164903)

P006 (Refinery Flare)
FCC/Coker Flare (PR 196128), treated as control equipment

P007 (Refinery Flare)
LIU Flare (PR 196510), treated as control equipment

P010 (Process)
FCC/CO Boiler (PR 175079) with ESP (PR 195995)

P011 (Process)
SRU Foul Condensate Stripper (PR 164263)

P012 (Process)

API oil/water separator with covers

P014 (Process)
Vacuum II Distillation Tower with Firebox (Crude II) (PR 164058)

P015 (Process)
Sulfur Recovery Unit--DEA Unit--Incinerator stack/Claus Unit (PR 175002), Fuel Gas Absorber (PR 164282), Propylene Contactor (PR 164326), DEA Regenerator (PR 164283)

P017 (Process)
Aromatics process: Extraction column (PR 164477), Thermal Hydroalkylation Reactor (PR 164565), Stripper Column (PR 164478), Benzene Recovery Column (PR164480), Cold Box (No PR)

P018 (Process)
Isomerization process: Stabilizer tower (PR 164491), Isomerization Reactor (PR 164976-head)(PR 164977-tail), Fuel Gas Scrubber (PR 164489)

P019 (Loading Rack)
Benzene Unit train loading rack

P023 (Loading Rack)
Benzene Single RR Car and TK Truck Loading Rack

P025 (Oil/Water Separator System)
Benzene NESHAPs Sewer System

P027 (Process)
Decanted Oil Filter with Knockout Drum

P028 (Process)
Oily sludge centrifuge system with thermal oxidizer

P029 (Trolumen Compressor)
Trolumen Gas Compressor

P030 (Process)
Reformer

P031 (Process)
Knock Motors - Laboratory

P032 (Process)
Knock Motors - Plant

P033 (SRU Cooling Tower)
SRU Cooling Tower

P034 (BH Cooling Tower)
Boiler House Cooling Tower

P036 (Acid Gas Flare)
Acid Gas Flare

P037 (LIU Cooling Tower)
LIU Cooling Tower

P038 (FCC Cooling Tower)
FCC Cooling Tower

P801 (Sewers)
Central, North, South Refinery Sewers

T009 (Tank 100216)
Storage of Organic Liquids

T010 (Tank 100085)
Storage of Organic Liquids

T011 (Tank 100084)

Storage of Organic Liquids

T017 (Tank 100096)
Storage of Organic Liquids

T018 (Tank 100134)
Storage of Organic Liquids

T019 (Tank 100135)
Storage of Organic Liquids

T020 (Tank 100201)
Storage of Organic Liquids

T021 (Tank 100202)
Storage of Organic Liquids

T022 (Tank 100203)
Storage of Organic Liquids

T023 (Tank 100204)
Storage of Organic Liquids

T024 (Tank 100205)
Storage of Organic Liquids

T025 (Tank 100206)
Storage of Organic Liquids

T026 (Tank 100207)
Storage of Organic Liquids

T027 (Tank 100208)
Storage of Organic Liquids

T028 (Tank 100209)
Storage of Organic Liquids

T029 (Tank 100210)
Storage of Organic Liquids

T030 (Tank 100212)
Storage of Organic Liquids

T031 (Tank 100213)
Storage of Organic Liquids

T032 (Tank 100214)
Storage of Organic Liquids

T033 (Tank 100215)
Storage of Organic Liquids

T034 (Tank 100220)
Storage of Organic Liquids

T035 (Tank 100222)
Storage of Organic Liquids

T036 (Tank 100226)
Storage of Organic Liquids

T037 (Tank 100227)
Storage of Organic Liquids

T038 (Tank 100228)
Storage of Organic Liquids

T039 (Tank 100231)
Storage of Organic Liquids

T040 (Tank 100233)
Storage of Organic Liquids

T041 (Tank 100238)
Storage of Organic Liquids

T042 (Tank 100239)

Storage of Organic Liquids

T043 (Tank 100244)
Storage of Organic Liquids

T044 (Tank 100245)
Storage of Organic Liquids

T045 (Tank 100248)
Storage of Organic Liquids

T046 (Tank 100250)
Storage of Organic Liquids

T047 (Tank 100251)
Storage of Organic Liquids

T048 (Tank 100327)
Storage of Organic Liquids

T049 (Tank 100223)
Storage of Organic Liquids

T053 (Tank 100229)
Storage of Organic Liquids

T054 (Tank 100230)
Storage of Organic Liquids

T055 (Tank 100232)
Storage of Organic Liquids

T057 (Tank 100235)
Storage of Organic Liquids

T058 (Tank 100236)
Storage of Organic Liquids

T059 (Tank 100246)
Storage of Organic Liquids

T060 (Tank 100247)
Storage of Organic Liquids

T061 (Tank 100249)
Storage of Organic Liquids

T062 (Tank 100252)
Storage of Organic Liquids

T064 (Tank 100263)
Storage of Organic Liquids

T065 (Tank 100264)
Storage of Organic Liquids

T066 (Tank 100324)
Storage of Organic Liquids

T067 (Tank 100325)
Storage of Organic Liquids

T068 (Tank 100326)
Storage of Organic Liquids

T070 (Tank 100025)
Storage of Organic Liquids

T071 (Tank 100026)
Storage of Organic Liquids

T072 (Tank 100028)
Storage of Organic Liquids

T073 (Tank 100256)
Storage of Organic Liquids

T074 (Tank 100253)

Storage of Organic Liquids

T075 (Tank 100255)
Storage of Organic Liquids

T076 (Tank 100219)
Storage of Organic Liquids

T078 (Tank 100076 (77A))
Storage of Organic Liquids

T080 (Tank 100351)
Storage of Organic Liquids

T081 (Tank 100352)
Storage of Organic Liquids

T083 (Tank 164559)
Tank 164559

T084 (Tank 100166)
Storage of Organic Liquids

T085 (Tank 100167)
Storage of Organic Liquids

T086 (Tank 100168)
Storage of Organic Liquids

T087 (Tank 100165)
Storage of Organic Liquids

T088 (Tank 100169)
Storage of Organic Liquids

T090 (Tank 100079)
Storage of Organic Liquids

T091 (Tank 100078)
Storage of Organic Liquids

T092 (Tank 100112)
Storage of Organic Liquids

T093 (Tank 100060)
Storage of Organic Liquids

T097 (Tank 100113)
Storage of Organic Liquids

T100 (Tank 100114)
Storage of Organic Liquids

T112 (Tank 100111)
Storage of Organic Liquids

T121 (Tank 100391)
Storage of Organic Liquids

T123 (Tank 100022)
Storage of Organic Liquids

T161 (Tank 100057)
Storage of Organic Liquids

T164 (Tank 100298)
Storage of Organic Liquids

T165 (Tank 100218)
Storage of Organic Liquids

T175 (Tank 100454)
Storage of Organic Liquids

T176 (Tank 100457)
Storage of Organic Liquids

T177 (Tank 100458)

Storage of Organic Liquids

T178 (Tank 100459)
Storage of Organic Liquids

T179 (Tank 100461)
Storage of Organic Liquids

T180 (Tank 100453)
Storage of Organic Liquids

T181 (Tank 100440)
Storage of Organic Liquids

T182 (Tank 100269)
Storage of Organic Liquids

T184 (Tank 100089)
Storage of Organic Liquids

T190 (Tank 100044)
Storage of Organic Liquids

T191 (Tank 100172)
Storage of Organic Liquids

T192 (Tank 100173)
Storage of Organic Liquids

T194 (Tank 100001)
Storage of Organic Liquids

T195 (Tank 100460)
Storage of Organic Liquids

T196 (Tank 100006)
Storage of Organic Liquids

T197 (Tank 100005)
Storage of Organic Liquids

T198 (Tank 100024)
Storage of Organic Liquids

T200 (Tank 164788)
Storage of Organic Liquids

T201 (Tank 100038)
Storage of Organic Liquids

T202 (Tank 100037)
Storage of Organic Liquids

T203 (Tank 100036)
Storage of Organic Liquids

T204 (Tank 100032)
Storage of Organic Liquids

T205 (Pipeline Tank 100320)
Storage of Petroleum Liquids

T206 (Pipeline Tank 100321)
Storage of Petroleum Liquids

T207 (Pipeline Tank 100322)
Storage of Petroleum Liquids

T208 (Pipeline Tank 100323)
Storage of Petroleum Liquids

T209 (Tank 164627)
Storage of Organic Liquids

T210 (Tank 104647)
Storage of Organic Liquids

T211 (Tank 100277)
Storage of Petroleum Liquids

T212 (Tank 100072)
Storage of Organic Liquids

T213 (Tank 100481)
Storage of Organic Liquids

T214 (Tank 100482)
Storage of Organic Liquids

T215 (Tank 100432)
Storage of Organic Liquids

T216 (Tank 100434)
Storage of Organic Liquids

T217 (Tank 164468 ("E-tank"))
Storage of Organic Liquids

T218 (Tank 330)
Storage of Organic Liquids

T219 (Tank 164242)
Storage of Organic Liquids

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 3745-77-04(A) 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:

Northwest District Office
347 North Dunbridge Road
Bowling Green, OH 43402
(419) 352-8461

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, i.e., in Section A.III of Part III of this Title V permit, 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. **All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:**

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 OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted by January 31, April 30, July 31, and October 31 of each year in accordance with General Term and Condition A.1.c.ii below; and each report shall cover the previous calendar quarter.

In accordance with OAC rule 3745-15-06, a malfunction constitutes a violation of an emission limitation (or control requirement) and, therefore, is a deviation of the federally enforceable permit requirements. Even though verbal notifications and written reports are required for malfunctions pursuant to OAC rule 3745-15-06, the written reports required pursuant to this term must be submitted quarterly to satisfy the prompt reporting provision of OAC rule 3745-77-07(A)(3)(c).

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) 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. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

Any scheduled maintenance, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

ii. **Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Section A.IV of Part III of this Title V permit or, in some cases, in Part II of this Title V permit, all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:**

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as provided below, the written reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation.

These written reports shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. OAC rule 3745-77-07(A)(3)(c) is not fully satisfied until the permittee addresses all other deviations of the federally enforceable requirements specified in the permit.

If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement overrides the reporting requirements specified in this General Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this General Term and Condition.

See B.6 below if no deviations occurred during the quarter.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

iii. **All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with General Term and Condition A.1.c.ii above shall be submitted in the following manner:**

Written reports that identify all other deviations of the federally enforceable requirements contained in this permit, including the monitoring, record keeping, and reporting requirements, which are not reported in accordance with General Term and Condition A.1.c.ii above shall be submitted to the appropriate Ohio EPA District Office or local air agency by January 31 and July 31 of each year; and each report shall cover the previous six calendar months.

In identifying each deviation, the permittee shall specify the federally enforceable 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 reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with General Term and Condition A.1.c.ii above.

If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such 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))

v. 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))

2. Scheduled Maintenance

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance 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). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in General Term and Condition A.1.c.i above.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

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. 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

b. 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. 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.
(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))

21. Permanent Shutdown of an Emissions Unit

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification by the responsible official of the date on which the emissions unit was permanently shut down. Authorization to operate the affected part or activity of the stationary source shall cease upon the date certified by the responsible official that the emissions unit was permanently shut down.

If an emissions unit is permanently shut down (i.e., that has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any monitoring, record keeping, reporting, or testing requirements, applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

No emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.

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 <u>Federally Enforceable</u> Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation 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 by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

The permittee is not required to submit a quarterly report which states that no deviations occurred during that quarter for the following situations:

a. where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in General Term and Condition A.1.c.ii;

b. where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potentials to emit; and

c. where the company's responsible official has certified that an emissions unit has been permanently shut down.

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforceable Section

1. [OAC rule 3745-25] Emergency Episode Standards

1.a Any person responsible for the operation of a source of air contaminants which emits 0.25 tons per day or more of air contaminants for which air quality standards have been adopted shall prepare emission control action programs, consistent with good industrial practice and safe operating procedures, for reducing the emission of air contaminants into the ambient air during periods of an air pollution "Alert", air pollution "Warning", and air pollution "Emergency". Emission control action programs shall be designed to reduce or eliminate emissions of air contaminants into the ambient air in accordance with the objectives set forth in tables 1 to 5 of Chapter 3745-25 of the Administrative Code.

1.b Emission control action programs required by paragraph (a) of this rule shall be in writing and show the source of air contamination, the approximate amount of reduction of contaminants, the approximate time required to effect the program, a brief description of the manner in which the reduction will be achieved during each stage of an air pollution episode, and such other information as the director shall deem pertinent.

1.c Emission control action programs shall be filed with the director at the following times:

i Existing sources - shall file not later than six months after adoption of these rules;

ii. New sources - shall file with application for permit to operate.

1.d During a condition of an air pollution "Alert" air pollution "Warning", and air pollution "Emergency" emission control action programs required by paragraph (a) of this rule shall be made available on the premises to any person authorized to enforce the provisions of the emergency procedure.

1.e Emission control action programs as required by paragraph (A) of this rule shall be submitted to the director upon request within thirty days of the receipt of such request; such emission control action programs shall be subject to review and approval by the director. If, in the opinion of the director, such emission control action programs do not effectively carry out the objectives as set forth in table 1 to 5 of Chapter 3745-25 of the Administrative Code, the director may disapprove said emission control action programs, state his reason for disapproval and order the preparation of amended emission control action programs within the time period specified in the order.

2. [OAC rule 3745-21-09 (T)] Leaks from petroleum refinery equipment.

Except as otherwise provided in paragraphs (T)(1)(b) and (T)(1)(c) of this rule, the permittee shall comply with the following monitoring, record keeping and reporting requirements no later

than the date specified in paragraph (C)(27) of OAC rule 3745-21-04. This requirement is applicable to all emissions units identified as being subject to OAC rule 3745-21-09(T) in Part III - Terms and Conditions for Emissions Units of this permit.

2.a [OAC rule 3745-21-09(T)(1)(a)]
Except as otherwise provided in paragraph (T)(1)(b) of OAC rule 3745-21-09(T), a monitoring program shall be developed and implemented which incorporates the following provisions:

i Yearly monitoring of all pump seals, pipeline valves in liquid service an process drains in accordance with the method specified in paragraph (F) of OAC rule 3745-21-10;

ii. 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 paragraph (F) of OAC rule 3745-21-10;

iii. Monthly monitoring of all pump seals by visual methods;

iv. Monitoring of any pump seal in accordance with the method specified in paragraph (F) of OAC rule 3745-21-10 within five working days after any liquids are observed dripping from the seal;

v. Monitoring of any relief valve in accordance with the method specified in paragraph (F) of OAC rule 3745-21-10 within five working days after the valve has vented to the atmosphere; and

vi. Monitoring of any component in accordance with the method specified in paragraph (F) of OAC rule 3745-21-10 within five working days after the repair of a leak;

2.b [OAC rule 3745-21-09(T)(1)(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 paragraph (T)(1)(a) of OAC rule 3745-21-09(T);

2.c [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 paragraph (T)(1)(a) of OAC rule 3745-21-09(T) as follows:

i The valve is designated as difficult to monitor and is monitored each calendar year, provided the following conditions are met:

(1) Construction of the process unit commenced prior to March 27, 1981;

(2) 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

(3) The permittee of the valve has a written plan that requires monitoring of the valve at least once per year;

(ii) The valve is designated as unsafe to monitor and monitored as frequently as practical during safe to monitor times, provided the following conditions are met:

(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 monitoring on a quarterly or yearly basis as specified in paragraph (T)(1)(a) of OAC rule 3745-21-09(T); and

(2) 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;

2.d [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 an identified in such a manner that they will be obvious to both refinery personnel performing monitoring and the director;

2.e [OAC rule 3745-21-09(T)(1)(e)]
If a leak is identified as a result of the monitoring program required by paragraph (T)(1)(a) of OAC rule 3745-21-09(T) 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;

2.f [OAC rule 3745-21-09(T)(1)(f)]
A monitoring log shall be maintained for all leaking components which are tagged in accordance with paragraph (T)(1)(e) of OAC rule 3745-21-09(T). The monitoring log shall contain, at a minimum, the following data:

i The name of the process unit where the leaking component is located;

ii. The type of leaking component (such as valve, seal, or other component);

iii. The tag number of the leaking component;

iv. The date on which the leaking component was detected;

v. The date on which the leaking component was repaired;

vi. The date and results of the monitoring performed within five working days after the leaking component was repaired;

vii. A record of the calibration of the monitoring instrument;

viii. A list of those leaking components which cannot be repaired until the next process unit turnaround; and

ix. The total number of components monitored and the total number of components found leaking during the calendar year;

2.g [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;

2.h [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; and

2.i [OAC rule 3745-21-09(T)(1)(i)]
A report shall be submitted to the director by January 15, April 15, July 15 and October 15 each year 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 calendar days and identifies all leaking components which cannot be repaired until the next process unit turnaround.

2.j [OAC rule 3745-21-09(T)(2)]
The permittee shall repair and retest any leaking component, which is tagged and identified in accordance with paragraph (T)(1)(e) of OAC rule 3745-21-09(T), 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.

2.k [OAC rule 3745-21-09(T)(3)]
The director 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 pursuant to division (R) of section 3704.03 of the Revised Code.

2.l [OAC rule 3745-21-09(T)(4)]
The director may accept an alternative monitoring, record keeping and reporting program for that required by paragraph (T)(1) of OAC rule 3745-21-09(T) 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

paragraph (T)(1) of OAC rule 3745-21-09(T). 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(DD) shall be acceptable to the director.

3. [OAC rule 3745-21-10(F)] Method for the Detection of Leaks of VOC from Petroleum Refinery Equipment and Organic Chemical Manufacturing Equipment

3.a [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.

3.b [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."

3.c [OAC rule 3745-21-10(F)(3)]
The calibration gases shall be:

i Zero air, which consists of less than ten ppmv of hydrocarbon in air; and

ii. 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.

3.d [OAC rule 3745-21-10(F)(4)]
The leak detection instrument shall be calibrated before use on each day of its use.

4. [OAC rule 3745-21-09(M)(3)] Process Unit Turnarounds

4.a The permittee shall control the emissions of VOC from process unit turnarounds no later than the date specified in paragraph (C)(14) of rule 3745-21-04 of the Administrative Code 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.

4.b 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.

5. [40 CFR 61, Subpart V] National Emission Standard for Equipment Leaks (Fugitive Emission Sources)

These requirements are applicable to all emissions units identified as being subject to 40 CFR 61, Subpart V in Part III - Terms and Conditions for Emissions Units of this permit.

5.a [40 CFR 61.240] Applicability and designation of sources

i The provisions of this subpart apply to each of the following sources that are intended to operate in volatile hazardous air pollutant (VHAP) service: pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, and control devices or systems required by this subpart.

ii. The provisions of this subpart apply to the sources listed in paragraph 7.a.i. above after the date of promulgation of a specific subpart in part 61.

iii. While the provisions of this subpart are effective, a source to which this subpart applies that is also subject to the provisions of 40 CFR part 60 only will be required to comply with the provisions of this subpart.

5.b [40 CFR 61.240] Alternative means of compliance

i. Option to comply with part 65. The permittee may choose to comply with 40 CFR part 65 to satisfy the requirements of 40 CFR 61.242-1 through 61.247 for equipment that is subject to this subpart and that is part of the same process unit. When choosing to comply with 40 CFR part 65, the requirements of 40 CFR 61.245(d) and 61.246(i) and (j) still apply. Other provisions applying to the permittee who chooses to comply with 40 CFR part 65 are provided in 40 CFR 65.1.

ii. Part 65, subpart C or F. If the permittee chooses to comply with 40 CFR part 65, each surge control vessel and bottoms receiver subject to this subpart that meets the conditions specified in table 1 or table 2 of this subpart shall meet the requirements for storage vessels in 40 CFR part 65, subpart C; all other equipment subject to this subpart shall meet the requirements in 40 CFR part 65, subpart F.

iii. Part 61, subpart A. Permittees who choose to comply with 40 CFR part 65, subpart C or F, must also comply with CFR 61.01, 61.02, 61.05 through 61.08, 61.10(b) through (d), 61.11, and 61.15 for that equipment. All sections and paragraphs of subpart A of this part that are not mentioned in 40 CFR 61.240(d)(3) do not apply to the permittee of equipment subject to this subpart 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. The permittee who chooses to comply with 40 CFR part 65, subpart C or F, must comply with 40 CFR part 65, subpart A.

iv. Rules referencing this subpart. The permittee referenced to this subpart from subpart F or J of this part may choose to comply with 40 CFR part 65 for all equipment listed in 40 CFR 61.240(a).

5.c [40 CFR 61.242-1] Standards: General

i Each permittee subject to the provisions of this subpart shall demonstrate compliance with the requirements of 40 CFR 61.242-1 to 61.242-11 for each new and existing source as required in 40 CFR 61.05, except as provided in 40 CFR 61.243 and 61.244.

ii. Compliance with this subpart will be detemined by review of records, review of performance test results, and inspection using the methods and procedures specified in 40 CFR 61.245.

iii. The permittee may request a determination of alternative means of emission limitation to the requirements of 40 CFR 61.242-2, 61.242-3, 61.242-5, 61.242-6, 61.242-7, 61.242-8, 61.242-9 and 61.242-11 as provided in 40 CFR 61.244.

iv. If the Administrator makes a determination that a means of emission limitation is at least a permissible alternative to the requirements of 40 CFR 61.242-2, 61.242-3, 61.242-5, 61.242-6, 61.242-7, 61.242-8, 61.242-9 or 61.242-11, the permittee shall comply with the requirements of that determination.

v. Each piece of equipment to which this subpart applies shall be marked in such a manner that it can be distinquished readily from other pieces of equipment.

vi. Equipment that is in vacuum service is excluded from the requirements of 40 CFR 61.242-2, to 40 CFR 61.242-11 if it is identified as required in 40 CFR 61.246(e)(5).

5.d [40 CFR 61.242-2] Standards: Pumps

i Each pump shall be monitored monthly to detect leaks by the methods specified in 40 CFR 61.245(b), except as provided in 40 CFR 61.242-1(c) and paragraphs (d), (e), (f) and (g) of 40 CFR 61.242-2.

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

iii. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

iv. If there are indications of liquids dripping from the pump seal, a leak is detected.

v. 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 61.242-10.

vi. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

5.e [40 CFR 61.242-2] Standards: Pumps (continued)

Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraphs (a) and (b) of 40 CFR 61.242-2, provided the following requirements are met:

i Each dual mechanical seal system is:

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

(2) 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 61.242-11; or

(3) Equipped with a system that purges the barrier fluid into a process stream with zero VHAP emissions to atmosphere.

ii. The barrier fluid is not in VHAP service and, if the pump is covered by standards under 40 CFR part 60, is not in VOC service.

iii. Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.

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

(1) If there are indications of liquid dripping from the pump seal at the time of the weekly inspection, the pump shall be monitored as specified in 40 CFR 61.245 to determine the presence of VOC and VHAP in the barrier fluid.

(2) If the monitor reading (taking into account any background readings) indicates the presence of VHAP, a leak is detected. For the purpose of this paragraph, the monitor may be calibrated with VHAP, or may employ a gas chromatography column to limit the response of the monitor to VHAP, at the option of the permittee.

(3) If an instrument reading of 10,000 ppm or greater (total VOC) is measured, a leak is detected.

5.f [40 CFR 61.242-2] Standards: Pumps (continued)

i Each sensor as described in paragraph (d)(3) of 40 CFR 61.242-2 is checked daily or is equipped with an audible alarm.

ii. 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.

iii. If indications of liquids dripping from the pump seal exceed the criteria established in paragraph (d)(6)(i) of 40 CFR 61.242-2, or if, based on the criteria established in paragraph (d)(6)(i) of 40 CFR 61.242-2, the sensor indicates failure of the seal system, the barrier fluid system, or both, a leak is detected.

iv. When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after it is detected, except as provided in 40 CFR 61.242-10.

v. A first attempt at repair shall be made no later than five calendar days after each leak is detected.

vi. Any pump that is designated, as described in 40 CFR 61.246(e)(2), 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), (c), and (d) of 40 CFR 61.242-2 if the pump:

(1) Has no externally actuated shaft penetrating the pump housing,

(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 method specified in 40 CFR 61.245(c), and

(3) Is tested for compliance with paragraph (e)(2) of 40 CFR 61.242-2 initially upon designation, annually, and at other times requested by the Administrator.

5.g [40 CFR 61.242-2] Standards: Pumps (continued)

i 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 fuel gas system or to a control device that complies with the requirements of 40 CFR 61.242-11, it is exempt from the requirements of paragraphs (a) through (e) of 40 CFR 61.242-2.

ii. Any pump that is designated, as described in 40 CFR 61.246(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 61.242-2 if:

(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 61.242-2; and

(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 paragraph (c) of 40 CFR 61.242-2 if a leak is detected.

iii. 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 61.242-2, and the daily requirements of paragraph (d)(5) of 40 CFR 61.242-2, provided that each pump is visually inspected as often as practicable and at least monthly.

5.h [40 CFR 61.242-3] Standards: Compressors

i Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of process fluid to atmosphere, except as provided in 40 CFR 61.242-1(c) and paragraphs (h) and (i) of 40 CFR 61.242-3.

ii. Each compressor seal system as required in 40 CFR 61.242-3(a) shall be:

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

(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 61.242-11; or

(3) Equipped with a system that purges the barrier fluid into a process stream with zero VHAP emissions to atmosphere.

iii. The barrier fluid shall not be in VHAP service and, if the compressor is covered by standards under 40 CFR part 60, shall not be in VOC service.

iv. Each barrier fluid system as described in paragraphs (a)-(c) of 40 CFR 61.242-3 shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.

v. Each sensor as required in paragraph (d) of 40 CFR 61.242-3 shall be checked daily or shall be equipped with an audible alarm unless the compressor is located within the boundary of an unmanned plant site.

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.

5.i [40 CFR 61.242-3] Standards: Compressors (continued)

i 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 61.242-3, a leak is detected.

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 40 CFR 61.242-10.

A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

iii. A compressor is exempt from the requirements of paragraphs (a) and (b) of 40 CFR 61.242-3 if it is equipped with a closed-vent system to capture and transport leakage from the compressor drive shaft back to a process or fuel gas system or to a control device that complies with the requirements of 40 CFR 61.242-11, except as provided in paragraph (i) of 40 CFR 61.242-3.

iv. Any compressor that is designated, as described in 40 CFR 61.246(e)(2), 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)-(h) of 40 CFR 61.242-3 if the compressor:

(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 method specified in 40 CFR 61.245(c); and

(2) Is tested for compliance with paragraph (i)(1) of 40 CFR 61.242-3 initially upon designation, annually, and at other times requested by the Administrator.

5.j [40 CFR 61.242-4] Standards: Pressure Relief Devices in Gas/Vapor Service

i 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 measured by the method specified in 40 CFR 61.245(c).

ii. 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 each pressure release, except as provided in 40 CFR 61.242-10.

iii. No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the condition of no detectable emissions, as indicated by an

instrument reading of less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c).

iv. 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 61.242-11 is exempt from the requirements of paragraphs (a) and (b) of 40 CFR 61.242-4.

v. 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 61.242-4 provided the permittee complies with the requirements in paragraph (d)(2) of 40 CFR 61.242-4.

vi. 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 61.242-10.

5.k [40 CFR 61.242-5] Standards: Sampling Connecting Systems

i Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed vent system, except as provided in 40 CFR 61.242-1(c). Gases displaced during filling of the sample container are not required to be collected or captured.

ii. Each closed-purge, closed-loop, or closed vent system as required in paragraph (a) of 40 CFR 61.242-5 shall comply with the requirements specified in paragraphs (b)(1) through (4) of 40 CFR 61.242-5:

(1) Return the purged process fluid directly to the process line; or

(2) Collect and recycle the purged process fluid; or

(3) Be designed and operated to capture and transport all the purged process fluid to a control device that complies with the requirements of 40 CFR 61.242-11; or

(4) Collect, store, and transport the purged process fluid to any of the following systems or facilities:

(a) 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; or

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

(c) 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. In-site sampling systems and sampling systems without purges are exempt from the requirements of paragraphs (a) and (b) of 40 CFR 61.242-5.

5.l [40 CFR 61.242-6] Standards: Open-ended Valves or Lines

i 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 61.242-1(c).

ii. 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.

iii. 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.

iv. 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 61.242-6 at all other times.

v. 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 61.242-6.

vi. 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 61.242-6 are exempt from the requirements of paragraphs (a) through (c) of 40 CFR 61.242-6.

5.m [40 CFR 61.242-7] Standards: Valves

i Each valve shall be monitored monthly to detect leaks by the method specified in 40 CFR 61.245(b) and shall comply with paragraphs (b)-(e) of 40 CFR 61.242-7, except as provided in paragraphs (f), (g), and (h) of 40 CFR 61.242-7, 40 CFR 61.243-1 or 40 CFR 61.243-2, and 40 CFR 61.242-1(c).

ii. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

iii. 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.

iv. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.

v. 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 61.242-10.

vi. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

vii. First attempts at repair include, but are not limited to, the following best practices where practicable:

(1) Tightening of bonnet bolts;

(2) Replacement of bonnet bolts;

(3) Tightening of packing gland nuts; and

(4) Injection of lubricant into lubricated packing.

viii. Any valve that is designated, as described in 40 CFR 61.246(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraph (a) of 40 CFR 61.242-7 if the valve:

(1) Has no external actuating mechanism in contact with the process fluid;

(2) Is operated with emissions less than 500 ppm above background, as measured by the method specified in 40 CFR 61.245(c); and

(3) Is tested for compliance with paragraph (f)(2) of 40 CFR 61.242-7 initially upon designation, annually, and at other times requested by the Administrator.

5.n [40 CFR 61.242-7] Standards: Valves (continued)

i Any valve that is designated, as described in 40 CFR 61.246(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of paragraph (a) of 40 CFR 61.242-7 if:

(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 paragraph (a) of 40 CFR 61.242-7; and

(2) The permittee of the valve has a written plan that requires monitoring of the valve as frequent as practicable during safe-to-monitor times.

ii. Any valve that is designated, as described in 40 CFR 61.246(f)(2), as a difficult-to-monitor valve is exempt from the requirements of paragraph (a) of 40 CFR 61.242-7 if:

(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;

(2) The process unit within which the valve is located is an existing process unit; and

3. The permittee of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

5.o [40 CFR 61.242-8] Standards: Pressure Relief Services in Liquid Service and Connectors

i If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pressure relief devices in liquid service and connectors, the permittee shall follow either one of the following procedures, except as provided in 40 CFR 61.242-1(c):

(1) The permittee shall monitor the equipment within 5 days by the method specified in 40 CFR 61.245(b) and shall comply with the requirements of paragraphs (b) through (d) of 40 CFR 61.242-8.

(2) The permittee shall eliminate the visual, audible, olfactory, or other indication of a potential leak.

ii. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

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 61.242-10.

iv. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

v. First attempts at repair include, but are not limited to, the best practices described under 40 CFR 61.242-7(e).

5.p [40 CFR 61.242-9] 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 1 or table 2 of this subpart shall be equipped with a closed-vent system capable of capturing and transporting any leakage from the vessel back to the process or to a control device as described in 40 CFR 61.242-11, except as provided in 40 CFR 61.242-1(c); or comply with the requirements of 40 CFR 63.119(b) or (c).

5.q [40 CFR 61.242-10] Standards: Delay of Repair

i 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. Delay of repair of equipment for which leaks have been detected will be allowed for equipment that is isolated from the process and that does not remain in VHAP service.

iii. Delay of repair for valves will be allowed if:

(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

(2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR 61.242-11.

iv. Delay of repair for pumps will be allowed if:

(1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and

(2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

v. 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.

5.r [40 CFR 61.242-11] Standards: Closed-vent Systems and Control Devices

i The permittee of closed-vent systems and control devices used to comply with provisions of this subpart shall comply with the provisions of this section, except as provided in 40 CFR 61.242-1(c).

ii. Vapor recovery systems (for example, condensers and absorbers) shall be designed and operated to recover the organic vapors 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. Enclosed combustion devices shall be designed and operated to reduce the VHAP 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 degrees Celsius.

iv. Flares shall used to comply with this subpart shall comply with the requirements of 40 CFR 60.18.

v. The permittee of control devices that are used to comply with the provisions of this supbart shall monitor these control devices to ensure that they are operated and maintained in conformance with their design.

vi. Except as provided in paragraphs (i) through (k) of 40 CFR 61.242-11, each closed vent system shall be inspected according to the procedures and schedule specified in paragraph (f)(1) or (2) of 40 CFR 61.242-11, as applicable.

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

(a) Conduct an initial inspection according to the procedures in 40 CFR 61.245(b); and

(b) Conduct annual visual inspections for visible, audible, or olfactory indications of leaks.

5.s [40 CFR 61.242-11] Standards: Closed-vent Systems and Control Devices (continued)

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

(1) Conduct an initial inspection according to the procedures in 40 CFR 61.245(b); and

(2) Conduct annual inspections according to the procedures in 40 CFR 61.245(b).

ii. 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 paragraph (h) of 40 CFR 61.242-11.

(1) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

(2) Repair shall be completed no later than 15 calendar days after the leak is detected.

iii. 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.

iv. 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 (2) of 40 CFR 61.242-11.

5.t [40 CFR 61.242-11] Standards: Closed-vent Systems and Control Devices (continued)

i Any parts of the closed vent system that are designated, as described in paragraph (l)(1) of 40 CFR 61.242-11, as unsafe-to-inspect are exempt from the inspection requirements of paragraphs (f)(1)(i) and (2) of 40 CFR 61.242-11 if they comply with the following requirements:

(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 paragraph (f)(1)(i) or (2) of 40 CFR 61.242-11; and

(2) The permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.

ii. Any parts of the closed vent system that are designated, as described in paragraph (l)(2) of 40 CFR 61.242-11, as difficult-to-inspect are exempt from the inspection requirements of paragraphs (f)(1)(i) and (2) of 40 CFR 61.242-11 if they comply with the following requirements:

(1) The permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and

(2) 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.

5.u [40 CFR 61.242-11] Standards: Closed-vent Systems and Control Devices (continued)

i The permittee shall record the following information:

(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.

(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.

(3) For each inspection during which a leak is detected, a record of the information specified in 40 CFR 61.246(c).

(4) For each inspection conducted in accordance with 40 CFR 61.245(b) 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.

(5) For each visual inspection conducted in accordance with paragraph (f)(1)(ii) of 40 CFR 61.242-11 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.

ii. 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.

5.v [40 CFR 61.243-1] Alternative Standards for Valves in VHAP Service - Allowable Percentage of Valves Leaking

i The permittee may elect to have all valves within a process unit to comply with an allowable percentage of valves leaking of equal to or less than 2.0 percent.

ii. The following requirements shall be met if the permittee decides to comply with an allowable percentage of valves leaking:

(1) The permittee must notify the Administrator that the permittee has elected to have all valves within a process unit to comply with the allowable percentage of valves leaking before implementing this alternative standard, as specified in 40 CFR 61.247(d).

(2) A performance test as specified in paragraph (c) of 40 CFR 61.243-1 shall be conducted initially upon designation, annually, and at other times requested by the Administrator.

(3) If a valve leak is detected, it shall be repaired in accordance with 40 CFR 61.242-7(d) and (e).

iii. Performance tests shall be conducted in the following manner:

(1) All valves in VHAP service within the process unit shall be monitored within 1 week by the methods specified in 40 CFR 61.245(b).

(2) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(3) The leak percentage shall be determined by dividing the number of valves in VHAP service for which leaks are detected by the number of valves in VHAP service within the process unit.

iv. Permittees who elect to have all valves comply with this alternative standard shall not have a process unit with a leak percentage greater than 2.0 percent.

v. If the permittee decides no longer to comply with 40 CFR 61.243-1, the permittee must notify the Administrator in writing that the work practice standard described in 40 CFR 61.242-7(a)-(e) will be followed.

5.w [40 CFR 61.243-2] Alternative Standards for Valves in VHAP Service - Skip Period Leak Detection and Repair

i The permittee may elect for all valves within a process unit to comply with one of the alternative work practices specified in paragraphs (b)(2) and (3) of 40 CFR 61.243-2.

ii. The permittee must notify the Administrator before implementing one of the alternative work practices, as specified in 40 CFR 61.247(d).

iii. The permittee shall comply initially with the requirements for valves, as described in 40 CFR 61.242-7.

iv. After 2 consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2.0, the permittee may begin to skip one of the quarterly leak detection periods for the valves in VHAP service.

v. After five consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2.0, the permittee may begin to skip three of the quarterly leak detection periods for the valves in VHAP service.

vi. If the percentage of valves leaking is greater than 2.0, the permittee shall comply with the requirements as described in 40 CFR 61.242-7 but may again elect to use this section.

5.x [40 CFR 61.244] Alternative Means of Emission Limitation

i Permission to use an alternative means of emission limitation under section 112(e)(3) of the Clean Air Act shall be governed by the following procedures:

ii. Where the standard is an equipment, design, or operational requirement:

(1) Each permittee applying for permission shall be responsible for collecting and verifying test data for an alternative means of emission limitation to test data for the equipment, design, and operational requirements.

(2) The Administrator may condition the permission 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. Where the standard is a work practice:

(1) Each permittee applying for permission shall be responsible for collecting and verifying test data for an alternative means of emission limitation.

(2) For each source for which permission is requested, the emission reduction achieved by the required work practices shall be demonstrated for a minimum period of 12 months.

(3) For each source for which permission is requested, the emission reduction achieved by the alternative means of emission limitation shall be demonstrated.

(4) Each permittee applying for permission shall commit in writing each source to work practices that provide for emission reductions equal to or greater than the emission reductions achieved by the required work practices.

(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).

(6) The Administrator may condition the permission on requirements that may be necessary to assure operation and maintenance to achieve the same emission reduction as the required work practices of this subpart.

5.y [40 CFR 61.244] Alternative Means of Emission Limitation (continued)

i The permittee may offer a unique approach to demonstrate the alternative means of emission limitation.

ii. Manufacturers of equipment used to control equipment leaks of a VHAP may apply to the Administrator for permission for an alternative means of emission limitation that achieves a reduction in emissions of the VHAP achieved by the equipment, design, and operational requirements of this subpart.

iii. The Administrator will grant permission according to the provisions of paragraphs (b), (c), and (d) of 40 CFR 61.244.

5.z [40 CFR 61.245] Test Methods and Procedures

i Each permittee subject to the provisions of this subpart shall comply with the test methods and procedures requirements provided in this section.

ii. Monitoring, as required in 40 CFR 61.242, 61.243, 61.244, and 61.135, shall comply with the following requirements:

(1) Monitoring shall comply with Method 21 of appendix A of 40 CFR part 60.

(2) The detection instrument shall meet the performance criteria of Method 21.

(3) The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21.

(4) Calibration gases shall be:

(a) Zero air (less than 10 ppm of hydrocarbon in air); and

(b) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

(5) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21.

iii. When equipment is tested for compliance with or monitored for no detectable emissions, the permittee shall comply with the following requirements:

(1) The requirements of paragraphs (b)(1) through (4) of 40 CFR 61.245 shall apply.

(2) The background level shall be determined, as set forth in Method 21.

(3) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21.

(4) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

5.za [40 CFR 61.245] Test Methods and Procedures (continued)

i Each piece of equipment within a process unit that can conceivably contain equipment in VHAP service is presumed to be in VHAP service unless the permittee demonstrates that the piece of equipment is not in VHAP service. For a piece of equipment to be considered not in VHAP service, it must be determined that the percent VHAP content can be reasonably expected never to exceed 10 percent by weight. For purposes of determining the percent VHAP content of the process fluid that is contained in or contacts equipment, procedures that conform to the methods described in ASTM Method D-2267 (incorporated by the reference as specified in 40 CFR 61.18) shall be used.

ii. The permittee may use engineering judgment rather than the procedures in paragraph (d)(1) of 40 CFR 61.245 to demonstrate that the percent VHAP content does not exceed 10 percent by weight, provided that the engineering judgment demonstrates that the VHAP content clearly does not exceed 10 percent by weight. When the permittee and the

Administrator do not agree on whether a piece of equipment is not in VHAP service, however, the procedures in paragraph (d)(1) of 40 CFR 61.245 shall be used to resolve the disagreement.

iii. If the permittee determines that a piece of equipment is in VHAP service, the determination can be revised only after following the procedures in paragraph (d)(1) of 40 CFR 61.245.

iv. Samples used in determining the percent VHAP content shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare.

5.zb [40 CFR 61.245] Test Methods and Procedures (continued)

i Method 22 of appendix A of 40 CFR part 60 shall be used to determine compliance of flares with the visible emission provisions of this subpart.

ii. 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.

iii. The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

Ht = K * sum of i=1,n * Ci * Hi

Where:

HT = Net heating value of the sample, MJ/scm (BTU/scf); where the net enthalpy per mole of offgas is based on combustion at 25 degrees Celsius and 760 mm Hg (77 degrees Fahrenheit and 14.7 psi), but the standard temperature for determining the volume corresponding to one mole is 20 degrees Celsius (68 degrees Fahrenheit).

K = conversion constant, 1.740 x 10^7 (g-mole) (MJ)/(ppm-scm-kcal) (metric units); or 4.674 x 10^8 ((g-mole) (Btu)/(ppm-scf-kcal)) (English units)

Ci = Concentration of sample component "i" in ppm, as measured by Method 18 of appendix A to 40 CFR part 60 and ASTM D2504-67, 77, or 88 (Reapproved 1993) (incorporated by reference as specified in 40 CFR 61.18).

Hi = net heat of combustion of sample component "i" at 25 degrees Celsius and 760 mm Hg (77 degrees Fahrenheit and 14.7 psi), kcal/g-mole. The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95 (incorporated by reference as specified in 40 CFR 61.18) if published values are not available or cannot be calculated.

iv. The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Method 2, 2A, 2C, or 2D, as appropriate, by the unobstructed (free) cross section area of the flare tip.

5.zc [40 CFR 61.245] Test Methods and Procedures (continued)

The maximum permitted velocity, Vmax, for air-assisted flares shall be determined by the following equation:

Vmax = K1 + K2 * Ht

Where:

Vmax = Maximum permitted velocity, m/sec (ft/sec).

Ht = Net heating value of the gas being combusted, as determined in paragraph (e)(3) of 40 CFR 61.245, MJ/scm (Btu/scf).

K1 = 8.706 m/sec (metric units)
= 28.56 ft/sec (English units)

K2 = 0.7084 m4/(MJ-sec) (metric units)
= 0.087 ft4/(Btu-sec) (English units)

5.zd [40 CFR 61.246] Record Keeping Requirements

i Each permittee subject to the provisions of this subpart shall comply with the recordkeeping requirements of this section. The permittee of more than one process unit subject to the provisions of this subpart may comply with the recordkeeping requirements for these process units in one recordkeeping system if the system identifies each record by each process unit.

ii. When each leak is detected as specified in 40 CFR 61.242-2, 61.242-3, 61.242-7, 61.242-8, and 61.135, the following requirements apply:

(1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

(2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 61.242-7(c) and no leak has been detected during those 2 months.

(3) The identification on equipment, except on a valve, may be removed after it has been repaired.

5.ze [40 CFR 61.246] Record Keeping Requirements (continued)

When each leak is detected as specified in 40 CFR 61.242-2, 61.242-3. 61.242-7, 61.242-8, and 61.135, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:

i. The instrument and operator identification numbers and the equipment identification number.

ii. The date the leak was detected and the dates of each attempt to repair the leak.

iii. Repair methods applied in each attempt to repair the leak.

iv. "Above 10,000" if the maximum instrument reading measured by the methods specified in 40 CFR 61.245(a) after each repair attempt is equal to or greater than 10,000 ppm.

v. "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

vi. The signature of the permittee (or designate) whose decision it was that repair could not be effected without a process shutdown.

vii. The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days.

viii. Dates of process unit shutdowns that occur while the equipment is unrepaired.

ix. The date of successful repair of the leak.

5.zf [40 CFR 61.246] Record Keeping Requirements (continued)

The following information pertaining to the design requirements for closed-vent systems and control devices described in 40 CFR 61.242-11 shall be recorded and kept in a readily accessible location:

i. Detailed schematics, design specifications, and piping and instrumentation diagrams.

ii. The dates and descriptions of any changes in the design specifications.

iii. A description of the parameter or parameters monitored, as required in 40 CFR 61.242-11(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.

iv. Periods when the closed-vent systems and control devices required in 40 CFR 61.242-2, 61.242-3, 61.242-4, 61.242-5 and 61.242-9 are not operated as designed, including periods when a flare pilot light does not have a flame.

v. Dates of startups and shutdowns of the closed-vent systems and control devices required in 40 CFR 61.242-2, 61.242-3, 61.242-4, 61.242-5 and 61.242-9.

5.zg [40 CFR 61.246] Record Keeping Requirements (continued)

The following information pertaining to all equipment to which a standard applies shall be recorded in a log that is kept in a readily accessible location:

i. A list of identification numbers for equipment (except welded fittings) subject to the requirements of this subpart. A list of identification numbers for equipment that the permittee elects to designate for no detectable emissions as indicated by an instrument reading of less than 500 ppm above background.

ii. The designation of this equipment for no detectable emissions shall be signed by the permittee.

iii. A list of equipment identification numbers for pressure relief devices required to comply with 40 CFR 61.242-4(a).

iv. The dates of each compliance test required in 40 CFR 61.242-2(e), 61.242-3(i), 61.242-4, 61.242-7(f), and 61.135(g).

v. The background level measured during each compliance test.

vi. The maximum instrument reading measured at the equipment during each compliance test.

vii. A list of identification numbers for equipment in vacuum service.

5.zh [40 CFR 61.246] Record Keeping Requirements (continued)

i The following information pertaining to all valves subject to the requirements of 40 CFR 61.242-7(g) and (h) and to all pumps subject to the requirements of 40 CFR 61.242-2(g) shall be recorded in a log that is kept in a readily accessible location:

(1) A list of identification numbers for valves and pumps 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.

(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 planned schedule for monitoring each valve.

ii. The following information shall be recorded for valves complying with 40 CFR 61.243-2:

(1) A schedule of monitoring.

(2) The percent of valves found leaking during each monitoring period.

iii. The following information shall be recorded in a log that is kept in a readily accessible location:

(1) Design criterion required in 40 CFR 61.242-2(d)(5), 61.242-3(e)(2), and 61.135(e)(4) and an explanation of the design criterion; and

(2) Any changes to this criterion and the reasons for the changes.

5.zi [40 CFR 61.246] Record Keeping Requirements (continued)

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 the applicability section of this subpart and other specific subparts:

(1) An analysis demonstrating the design capacity of the process unit, and

(2) An analysis demonstrating that equipment is not in VHAP service.

ii. Information and data used to demonstrate that a piece of equipment is not in VHAP service shall be recorded in a log that is kept in a readily accessible location.

5.zj [40 CFR 61.247] Reporting Requirements

i The permittee of any piece of equipment to which this subpart applies shall submit a statement in writing notifying the Administrator that the requirements of 40 CFR 61.242, 61.245, 61.246, and 61.247 are being implemented.

ii. In the case of an existing source or a new source which has an initial startup date preceding the effective date, the statement is to be submitted within 90 days of the effective date, unless a waiver of compliance is granted under 40 CFR 61.11, along with the information required under 40 CFR 61.10. If a waiver of compliance is granted, the statement is to be submitted on a date scheduled by the Administrator.

iii. In the case of new sources which did not have an initial startup date preceding December 14, 2000, the statement required under paragraph (a)(1) of 40 CFR 61.247 shall be submitted with the application for approval of construction, as described in 40 CFR 61.07.

iv. For permittees complying with 40 CFR part 65, subpart C or F, the statement required under paragraph (a)(1) of 40 CFR 61.247 shall notify the Administrator that the requirements of 40 CFR part 65, subpart C or F, are being implemented.

v. The statement is to contain the following information for each source:

(1) Equipment identification number and process unit identification.

(2) Type of equipment (for example, a pump or pipeline valve).

(3) Percent by weight VHAP in the fluid at the equipment.

(4) Process fluid state at the equipment (gas/vapor or liquid).

(5) Method of compliance with the standard (for example, "monthly leak detection and repair" or "equipped with dual mechanical seals").

5.zk [40 CFR 61.247] Reporting Requirements (continued)

i A report shall be submitted to the Administrator semiannually starting 6 months after the initial report required in paragraph (a) of 40 CFR 61.247, that includes the following information:

(1) Process unit identification.

(2) For each month during the semiannual reporting period,

(a) Number of valves for which leaks were detected as described in 40 CFR 61.242-7(b) of 40 CFR 61.243-2.

(b) Number of valves for which leaks were not repaired as required in 40 CFR 61.242-7(d).

(c) Number of pumps for which leaks were detected as described in 40 CFR 61.242-2 (b) and (d)(6).

(d) Number of pumps for which leaks were not repaired as required in 40 CFR 61.242-2 (c) and (d)(6).

(e) Number of compressors for which leaks were detected as described in 40 CFR 61.242-3(f).

(f) Number of compressors for which leaks were not repaired as required in 40 CFR 61.242-3(g).

(g) The facts that explain any delay of repairs and, where appropriate, why a process unit shutdown was technically infeasible.

(3) Dates of process unit shutdowns which occurred within the semiannual reporting period.

(4) Revisions to items reported according to paragraph (a) if changes have occurred since the initial report or subsequent revisions to the initial report.

Note: Compliance with the requirements of 40 CFR 61.10(c) is not required for revisions documented under this paragraph.

(5) The results of all performance tests and monitoring to determine compliance with no detectable emissions and with 40 CFR 61.243-1 and 61.243-2 conducted within the semiannual reporting period.

5.zl [40 CFR 61.247] Reporting Requirements (continued)

i In the first report submitted as required in paragraph (a) of 40 CFR 61.247, the report shall include a reporting schedule stating the months that semiannual reports shall be submitted. Subsequent reports shall be submitted according to that schedule, unless a revised schedule has been submitted in a previous semiannual report.

ii. A permittee electing to comply with the provisions of 40 CFR 61.243-1 and 61.243-2 shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions.

iii. An application for approval of construction or modification, 40 CFR 61.05(a) and 61.07, will not be required if:

(1) The new source complies with the standard, 40 CFR 61.242;

(2) The new source is not part of the construction of a process unit; and

(3) In the next semiannual report required by paragraph (b) of 40 CFR 61.247, the information in paragraph (a)(5) of 40 CFR 61.247 is reported.

iv. For permittees choosing to comply with 40 CFR part 65, subpart C or F, an application for approval of construction or modification, as required under 40 CFR 61.05 and 61.07 will not be required if:

(1) The new source complies with 40 CFR 65.106 through 65.115 and with 40 CFR part 65, subpart C, for surge control vessels and bottoms receivers;

(2) The new source is not part of the construction of a process unit; and

(3) In the next semiannual report required by 40 CFR 65.120(b) and 65.48(b), the information in paragraph (a)(5) of 40 CFR 61.247 is reported.

6. [OAC rule 3745-21-09(DD)] Leaks from Process Units that Produce Organic Chemicals

6.a [OAC rule 3745-21-09(DD)(1)]
Except where exempted under paragraph (DD)(17) of this rule, each permittee of a process unit that produces as an intermediate or final product one or more of the organic chemicals identified in appendix A of this rule shall comply with the requirements in paragraphs (DD)(2) to (DD)(6) of this rule no later than the date specified in paragraph (C)(38) of rule 3745-21-04 of the Administrative Code.

6.b [OAC rule 3745-21-09(DD)(2)] Leak detection and repair program.

i. A leak detection and repair program for equipment in the process unit shall be developed and implemented in accordance with the requirements specified in paragraphs (DD)(2)(b) to (DD)(2)(m) of this rule.

ii. Except as otherwise provided in paragraphs (DD)(2)(c) and (DD)(2)(d) of this rule, equipment shall be monitored for leaks in accordance with the method specified in paragraph (F) of rule 3745-21-10 of the Administrative Code, as follows:

(1) Any pump in light liquid service shall be monitored monthly.

(2) Any valve in gas/vapor service or in light liquid service shall be monitored monthly, except that quarterly monitoring may be employed anytime after no leaks are detected during two consecutive months. The quarterly monitoring shall begin with the next calendar quarter following the two consecutive months of no detected leaks and shall be conducted in the first month of each calendar quarter. The quarterly monitoring may continue until a leak is detected, at which time monthly monitoring shall be employed again.

(3) Any of the following equipment shall be monitored within five calendar days after evidence of a leak or potential leak from the equipment by visual, audible, olfactory, or other detection method:

(a) Any pump in heavy liquid service;

(b) Any valve in heavy liquid service;

(c) Any pressure relief device in light liquid service or in heavy liquid service; and

(d) Any flange or other connector.

(4) Any equipment in which a leak is detected as described in paragraph (DD)(2)(g) of this rule shall be monitored within five working days after each attempt to repair, unless the permittee believes that the equipment was not successfully repaired.

iii. For any valve in gas/vapor service or in light liquid service, an alternative monitoring schedule may be employed in lieu of the monitoring schedule specified in paragraph (DD)(2)(b)(ii) of this rule as follows:

(1) The valve is designated as difficult to monitor and is monitored each calendar year, provided the following conditions are met:

(a) Construction of the process unit commenced prior to May 9, 1986.

(b) 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.

(c) The permittee of the valve has a written plan that requires monitoring of the valve at least once per year.

(2) 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:

(a) 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 monthly basis.

(b) The permittee of the valve adheres to a written plan that requires monitoring of the valve as frequently as practical during safe to monitor times.

(3) The valve is subject to an alternative monitoring schedule based on a skip period as specified in paragraph (DD)(12) of this rule.

iv. Excluded from the monitoring requirements of paragraph (DD)(2)(b) of this rule are the following equipment:

(1) Any pump that has no externally actuated shaft penetrating the pump housing and that is designated for no detectable emissions as provided in paragraph (DD)(7) of this rule;

(2) Any pump that is equipped with a dual mechanical seal which has a barrier fluid system and sensor that comply with the requirements specified in paragraph (DD)(8) of this rule;

(3) Any pump that is equipped with a closed vent system capable of capturing and transporting any leakage from the pump seal to control equipment, provided the closed vent system and the control equipment comply with the requirements specified in paragraphs (DD)(9) and (DD)(10) of this rule;

(4) Any valve that has no externally actuated stem penetrating the valve and that is designated for no detectable emissions as provided in paragraph (DD)(7) of this rule; and

(5) Any valve that is subject to the alternative monitoring standard for valves based on the percentage of valves leaking as provided in paragraph (DD)(13) of this rule.

v. Any pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal, unless the pump is equipped with a closed vent system capable of transporting any leakage from the pump seal to control equipment, and the closed vent system and control equipment comply with the requirements specified in paragraphs (DD)(9) and (DD)(10) of this rule.

vi. Any sensor employed pursuant to paragraph (DD)(2)(d)(ii) or (DD)(3)(b) of this rule shall be checked daily, unless the sensor is equipped with an audible alarm.

vii. A leak is detected:

(1) When a concentration of ten thousand ppmv or greater is measured from a potential leak interface of any equipment that is monitored for leaks using the method in paragraph (F) of rule 3745-21-10 of the Administrative Code;

(2) When there is an indication of liquids dripping from the seal of a pump in light liquid service; or

(3) When a sensor employed pursuant to paragraph (DD)(2)(d)(ii) or (DD)(3)(b) of this rule indicates failure of the seal system, the barrier fluid system, or both.

viii. When a leak is detected as described in paragraph (DD)(2)(g) of this rule, the following procedures shall be followed:

(1) A weatherproof and readily visible identification tag, marked with the equipment identification number, is immediately attached to the leaking equipment.

(2) A record of the leak and any attempt to repair the leak is entered into the leak repair log kept pursuant to paragraph (DD)(2)(k) of this rule.

(3) The identification tag attached to the leaking equipment, other than a valve that is monitored pursuant to paragraph (DD)(2)(b)(ii) of this rule, may be removed after the leaking equipment is repaired.

(4) The identification tag attached to a leaking valve that is monitored pursuant to paragraph (DD)(2)(b)(ii) of this rule may be removed after the leaking valve is repaired, monitored for leaks for two consecutive months as specified in paragraph (DD)(2)(b)(ii) of this rule, and found to have no detected leaks during those two consecutive months.

ix. When a leak is detected as described in paragraph (DD)(2)(g) of this rule, the leaking equipment shall be repaired as soon as practicable, but no later than fifteen calendar days after the leak is detected, except for a delay of repair as provided in paragraph (DD)(11) of this rule. Leaking equipment shall be deemed repaired if the maximum concentration measured pursuant to paragraph (DD)(2)(b)(iv) of this rule is less than ten thousand ppmv.

x. When a leak is detected as described in paragraph (DD)(2)(g) of this rule, a first attempt at repair shall be made no later than five calendar days after the leak is detected; and the first attempts at repair shall include, but are not limited to, the following best practices where practicable:

(1) Tightening of bonnet bolts;

(2) Replacement of bonnet bolts;

(3) Tightening of packing gland nuts; and

(4) Injection of lubricant into lubricated packing.

xi. When a leak is detected as described in paragraph (DD)(2)(g) of this rule, the following information shall be recorded in a leak repair log:

(1) The identification number of the leaking equipment and, for leaks based on monitoring, the identification numbers of the leak detection instrument and its operator;

(2) The basis for the detection of the leak; for example, monitoring, visual inspection, or sensor;

(3) The date on which the leak was detected and the date of each attempt to repair the leaking equipment;

(4) The methods of repair applied in each attempt to repair the leaking equipment;

(5) One of the following entries within five working days after each attempt to repair the leaking equipment:

(a) "Not monitored," denoting the leaking equipment was presumed to still be leaking and it was not monitored; or

(b) If the leaking equipment was monitored with a leak detection instrument, the maximum concentration that was measured as follows:

(i) The actual reading in ppmv; or

(ii) "Below 10,000," denoting less than ten thousand ppmv; or

(iii) "Above 10,000," denoting not less than ten thousand ppmv;

(6) If the leak is not repaired within fifteen calendar days after the date on which it was detected:

(a) "Repair delayed" and the reason for the delay;

(b) If repair is being delayed until the next process unit shutdown due to technical infeasibility of repair, the signature of the permittee whose decision it was that repair is technically infeasible without a process unit shutdown;

(c) The expected date of successful repair of the leak;

(d) The dates of process unit shutdowns that occur while the leaking equipment is unrepaired; and

(7) The date on which the leak was successfully repaired.

xii. The leak repair log shall be retained by the permittee of the process unit in a readily accessible location for a minimum of two years after the date on which the record was made.

xiii. Semiannual reports shall be submitted to the Director by the first day of February and August and shall include the following information for the preceding semiannual periods:

(1) The process unit identification;

(2) The number of pumps in light liquid service excluding those pumps designated for no detectable emissions under the provision of paragraph (DD)(2)(d)(i) of this rule and those pumps complying with paragraph (DD)(2)(d)(iii) of this rule;

(3) The number of valves in gas/vapor service or in light liquid service excluding those valves designated for no detectable emission under the provision of paragraph (DD)(2)(d)(iv) of this rule and those valves subject to the alternative

standard for monitoring under the provision of paragraph (DD)(2)(d)(v) of this rule;

(4) The number of compressors excluding those compressors designated for no detectable emissions under the provision of paragraph (DD)(3)(c) of this rule and those compressors complying with paragraph (DD)(3)(d) or (DD)(3)(e) of this rule;

(5) For each month during the semiannual period:

(a) The number of pumps in light liquid service for which leaks were detected as described in paragraph (DD)(2)(g) of this rule;

(b) The number of pumps in light liquid service for which leaks were not repaired within fifteen calendar days after the date of leak detection;

(c) The number of valves in gas/vapor service or in light liquid service for which leaks were detected as described in paragraph (DD)(2)(g) of this rule;

(d) The number of valves in gas/vapor service or in light liquid service for which leaks were not repaired within fifteen calendar days after the date of leak detection;

(e) The number of compressors for which leaks were detected as described in paragraph (DD) of this rule;

(f) The number of compressors for which leaks were not repaired within fifteen calendar days after the date of leak detection; and

(g) The facts that explain each delay of repair allowed pursuant to paragraph (DD)(11) of this rule; and

(6) The dates of process unit shutdowns that occurred within the semiannual period.

6.c [OAC rule 3745-21-09(DD)(3)] Compressors

i. Except as otherwise provided in paragraphs (DD)(3)(c) to (DD)(3)(e) of this rule, any compressor in the process unit shall comply with the requirements specified in paragraph (DD)(3)(b) of this rule.

ii. The compressor shall be equipped with a seal that has a barrier fluid system and sensor which comply with the requirements specified in paragraph (DD)(8) of this rule.

iii. Excluded from the requirements of paragraph (DD)(3)(b) of this rule is any compressor that is designated for no detectable emissions as provided in paragraph (DD)(7) of this rule.

iv. Excluded from the requirements of paragraph (DD)(3)(b) of this rule is any compressor that is equipped with a closed vent system capable of capturing and transporting any leakage from the compressor seal to control equipment, provided the closed vent system and the control equipment comply with the requirements specified in paragraphs (DD)(9) and (DD)(10) of this rule.

v. Excluded from the requirements of paragraph (DD)(3)(b) of this rule is any reciprocating compressor that meets the following conditions:

(1) The compressor was installed prior to May 9, 1986; and

(2) The permittee of the compressor demonstrates to the satisfaction of the Director that recasting the compressor distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the requirements of paragraph (DD)(3)(b) of this rule.

6.d [OAC rule 3745-21-09(DD)(4)] Pressure Relief Devices in Gas/Vapor Service

i. Except as otherwise provided in paragraph (DD)(4)(e) of this rule, any pressure relief device in gas/vapor service in the process unit shall comply with the requirements specified in paragraphs (DD)(4)(b) to (DD)(4)(d) of this rule.

ii. Except during pressure releases, the pressure relief device shall be operated with no detectable emissions, as indicated by an instrument reading of less than five hundred ppmv above background, as measured by the method specified in paragraph (F) of rule 3745-21-10 of the Administrative Code.

iii. No later than five calendar days after a pressure release, the pressure relief device shall be tested to confirm the condition of no detectable emissions in accordance with the method specified in paragraph (F) of rule 3745-21-10 of the Administrative Code.

iv. After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions as soon as practicable, but no later than five calendar days after the pressure release, except for a delay of repair as provided in paragraph (DD)(11) of this rule.

v. Excluded from the requirements of paragraphs (DD)(4)(b) to (DD)(4)(d) of this rule is any pressure relief device that is equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to control equipment, provided the closed vent system and control equipment comply with the requirements specified in paragraphs (DD)(9) and (DD)(10) of this rule.

6.e [OAC rule 3745-21-09(DD)(5)] Sampling connection system.

i. Except as otherwise provided in paragraph (DD)(5)(c) of this rule, any sampling connection system in the process unit shall comply with the requirements specified in paragraph (DD)(5)(b) of this rule.

ii. The sampling connection system shall be equipped with a closed purge system or a closed vent system that meets one of the following requirements:

(1) The purged process fluid is returned directly to the process line with zero VOC emissions to the ambient air;

(2) The purged process fluid is collected and recycled with zero VOC emissions to the ambient air; or

(3) The closed purge system or closed vent system is designed and operated to capture and transport all the purged process fluid to control equipment that meet the requirements specified in paragraph (DD)(10) of this rule.

iii. Excluded from the requirements of paragraph (DD)(5)(b) of this rule is any sampling connection system that is an in-situ sampling system.

6.f [OAC rule 3745-21-09(DD)(6)] Open-ended valves or lines.

i. Any open-ended valve or line in the process unit shall be equipped with a cap, blind flange, plug, or second valve and shall comply with the requirements specified in paragraphs (DD)(6)(b) to (DD)(6)(d) of this rule.

ii. Except during operations requiring the flow of process fluid through the open-ended valve or line, the cap, blind flange, plug, or second valve shall seal the open end of the open-ended valve or line.

iii. If equipped with a second valve, the open-ended valve or line shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.

iv. If 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 (DD)(6)(b) of this rule at all other times.

6.g [OAC rule 3745-21-09(DD)(7)] Equipment designated for no detectable emissions.

i. Any equipment (pump, valve, or compressor) designated for no detectable emissions pursuant to paragraph (DD)(2)(d)(i), (DD)(2)(d)(iv) or (DD)(3)(c) of this rule shall

comply with the requirements specified in paragraphs (DD)(7)(b) to (DD)(7)(d) of this rule.

ii. The equipment shall be operated with no detectable emissions as indicated by an instrument reading of less than five hundred ppmv above background as measured by paragraph (F) of rule 3745-21-10 of the Administrative Code.

iii. The equipment shall be tested for compliance with paragraph (DD)(7)(b) of this rule initially upon designation and annually.

iv. The designation of the equipment shall be signed by the permittee of the equipment in the log kept pursuant to paragraph (DD)(14)(b) of this rule.

6.h [OAC rule 3745-21-09(DD)(8)] Barrier fluid systems and sensors for pumps and compressors.

i. When a pump or compressor is equipped with a seal that has a barrier fluid system and sensor which are employed to meet the requirements of paragraph (DD)(2)(d)(ii) or (DD)(3)(a) of this rule, the requirements of paragraphs (DD)(8)(b) to (DD)(8)(d) of this rule shall be met.

ii. The barrier fluid system shall meet one of the following conditions:

(1) The barrier fluid system is operated with a barrier fluid at a pressure that is at all times greater than the stuffing box pressure of the pump or compressor.

(2) The barrier fluid system is equipped with a barrier fluid degassing reservoir that is connected by a closed vent system to control equipment and the closed vent system and control equipment comply with the requirements specified in paragraphs (DD)(9) and (DD)(10) of this rule.

(3) The barrier fluid system is equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the ambient air.

iii. The barrier fluid system shall be in heavy liquid service or shall not be in VOC service.

iv. The barrier fluid system shall be equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both based on criteria determined by the permittee from design considerations and operating experience.

6.i [OAC rule 3745-21-09(DD)(9)] Closed vent systems.

i. Any closed vent system that is used to comply with the requirements of paragraph (DD)(2)(d)(iii), (DD)(3)(d), (DD)(4)(e), or (DD)(8)(b)(ii) of this rule shall comply with the requirements specified in paragraphs (DD)(9)(b) to (DD)(9)(d) of this rule.

ii. The closed vent system shall be designed and operated with no detectable emissions, as indicated by an instrument reading of less than five hundred ppmv above background, as measured by the method specified in paragraph (F) of rule 3745-21-10 of the Administrative Code.

iii. The closed vent system shall be tested for compliance with paragraph (DD)(9)(b) of this rule initially and annually.

iv. The closed vent system shall be operated at all times when emissions may be vented to it.

6.j [OAC rule 3745-21-09(DD)(10)] Control equipment.

i. Any control equipment that is used to comply with the requirements of paragraph (DD)(2)(d)(iii), (DD)(3)(d), (DD)(4)(e), (DD)(5)(b)(iii), (DD)(8)(b)(ii), or (DD)(11)(d)(ii) of this rule shall comply with the requirements specified in paragraphs (DD)(10)(b) to (DD)(10)(f) of this rule.

ii. If the control equipment is a vapor recovery system, it shall be designed and operated to recover VOC emissions vented to it with an efficiency of at least ninety-five per cent by weight.

iii. If the control equipment is an enclosed combustion device, it shall be designed and operated to reduce the VOC emissions vented to it with an efficiency of at least ninety-five per cent by weight, or to provide a minimum residence time of 0.75 second at a minimum temperature of fifteen hundred degrees Fahrenheit.

iv. If the control equipment is a flare, it shall meet the following requirements:

(1) The flare 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.

(2) The flare 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 any failure.

(3) The flare shall be steam-assisted, air-assisted or nonassisted.

(4) The net heating value of the gas being combusted in the flare, as determined by the method specified in paragraph (P)(2) of rule 3745-21-10 of the Administrative Code, shall be three hundred Btu/scf or greater if the flare is steam-assisted or air-assisted, or shall be two hundred Btu/scf or greater if the flare is nonassisted.

(5) Except as provided in paragraph (DD)(10)(d)(vi) of this rule, the flare shall be designed and operated with an actual exit velocity, as determined by the method specified in paragraph (P)(3) of rule 3745-21-10 of the Administrative Code, 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 rule 3745-21-10 of the Administrative Code, if the flare is air-assisted.

(6) Excluded from the requirements of paragraph (DD)(10)(d)(v) of this rule is any steam-assisted or nonassisted flare that meets both of the following requirements:

(a) The net heating value of the gas being combusted in the flare, as determined by the method specified in paragraph (P)(2) of rule 3745-21-10 of the Administrative Code, shall be greater than one thousand Btu/scf.

(b) The flare shall be designed and operated with an actual exit velocity, as determined by the method specified in paragraph (P)(3) of rule 3745-21-10 of the Administrative Code, less than four hundred feet per second.

(c) The permittee of the control equipment shall monitor the control equipment to ensure that it is operated and maintained in conformance with its design.

(d) The control equipment shall be operated at all times when emissions may be vented to it.

6.k [OAC rule 3745-21-09(DD)(11)] Delay of repair.

i. A delay of repair that is employed pursuant to paragraph (DD)(2)(i) or (DD)(4)(d) of this rule shall be allowed only as provided in paragraphs (DD)(11)(b) to (DD)(11)(f) of this rule.

ii. A delay of repair shall be allowed if the repair is technically infeasible without a process unit shutdown. However, the repair shall occur before the end of the next process unit shutdown.

iii. A delay of repair shall be allowed for a piece of equipment that is isolated from the process and that does not remain in VOC service (for example, isolated from the process and properly purged).

iv. A delay of repair for a valve shall be allowed if:

(1) The permittee of the valve demonstrates that the emission of purged material resulting from immediate repair is greater than the emission likely to result from delay of repair; and

(2) When repair procedures are effected, the purged material is collected and destroyed or recovered in control equipment that meets the requirements specified in paragraph (DD)(10) of this rule.

v. A delay of repair for a pump shall be allowed if:

(1) The repair requires the use of a dual mechanical seal system and associated barrier fluid system; and

(2) The repair is completed as soon as practicable, but no later than six months after the leak was detected.

vi. A delay of repair beyond a process unit shutdown shall be allowed for a valve if a 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. A delay of repair beyond the next process unit shutdown shall not be allowed for that valve unless the next process unit shutdown occurs sooner than six months after the first process unit shutdown.

6.l [OAC rule 3745-21-09(DD)(12)] Alternative monitoring schedule for valves based on a skip period.

i. Any permittee of a process unit may elect to implement an alternative monitoring schedule in lieu of the monitoring requirements specified in paragraph (DD)(2)(b)(ii) of this rule, as provided in paragraph (DD)(2)(c)(iii) of this rule. The alternative monitoring schedule shall be based on skipping quarterly monitoring periods provided the percentage of valves leaking is no more than 2.0. Any permittee who elects to implement an alternative monitoring schedule shall comply with the requirements specified in paragraphs (DD)(12)(b) to (DD)(12)(h) of this rule.

ii. The permittee must notify the director prior to implementing this alternative monitoring schedule. Such notification must identify which valves will be subject to this alternative monitoring schedule and which work practice within paragraph (DD)(12)(e) of this rule will be implemented. Any valve in vacuum service, in heavy liquid service, or not in VOC service, shall be excluded from this alternative monitoring schedule.

iii. Any valve subject to this alternative monitoring schedule shall comply initially with the monitoring requirements specified in paragraph (DD)(2)(b)(ii) of this rule.

iv. Any valve subject to this alternative monitoring schedule shall continue to be subject to the requirements specified in paragraphs (DD)(2)(g) to (DD)(2)(m) of this rule.

v. One of the following two alternative work practices for skipping monitoring periods may be implemented:

(1) After two consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2.0, a monitoring program may begin in which the first quarter of every two consecutive quarterly leak detection periods is skipped.

(2) After five consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2.0, a monitoring program may begin in which the first three quarters of every four consecutive quarterly periods is skipped.

vi. If the percentage of valves leaking is greater than 2.0, the permittee shall comply with the monitoring requirements as specified in paragraph (DD)(2)(b)(ii) of this rule, but may again elect to use this alternative monitoring schedule.

vii. The percentage of valves leaking shall be determined for the valves subject to this alternative monitoring schedule as the sum of the number of those valves found leaking during any portion of the current monitoring period and the number of those valves found leaking during a previous monitoring period for which repair has been delayed during the current monitoring period, divided by the total number of valves, and multiplied by one hundred.

viii. The following information pertaining to valves subject to this alternative monitoring schedule shall be recorded in a log that is kept in a readily accessible location:

(1) A schedule of monitoring; and

(2) The percentage of valves leaking during each monitoring period.

6.m [OAC rule 3745-21-09(DD)(13)] Alternative monitoring standard for valves based on the allowable percentage of valves leaking.

i. Any permittee of a process unit may elect to implement an alternative monitoring standard in lieu of the monitoring requirements specified in paragraph (DD)(2)(b)(ii) of this rule, as provided in paragraph (DD)(2)(d)(v) of this rule. The alternative monitoring standard shall be based on maintaining the percentage of valves leaking at 2.0 or less. Any permittee who elects to implement an alternative monitoring standard shall comply with the requirements specified in paragraphs (DD)(13)(b) to (DD)(13)(g) of this rule.

ii. The permittee must notify the director prior to implementing this alternative monitoring standard.

iii. All valves in gas/vapor service or in light liquid service in the process unit shall be subject to this alternative monitoring standard, except for those valves which are designated as unsafe to monitor as provided in paragraph (DD)(2)(c)(ii) of this rule, those valves not in VOC service, and those valves in vacuum service.

iv. The percentage of valves leaking, as determined in accordance with paragraph (DD)(13)(f) of this rule, shall not exceed 2.0. If the percentage of valves leaking is greater than 2.0, the permittee shall comply with the monitoring requirements as specified in paragraph (DD)(2)(b)(ii) of this rule, but may again elect to use this alternative monitoring standard.

v. All valves subject to this alternative monitoring standard shall be tested for compliance with paragraph (DD)(13)(d) of this rule initially upon implementation and annually.

vi. A compliance test shall be conducted in the following manner:

(1) All valves subject to this alternative monitoring standard shall be monitored for leaks within a one-week period by the method specified in paragraph (F) of rule 3745-21-10 of the Administrative Code.

(2) If an instrument reading of ten thousand ppmv or greater is measured, a leak is detected.

(3) The percentage of valves leaking shall be determined as the number of valves for which a leak is detected, divided by the number of valves monitored, and multiplied by one hundred.

vii. When a leak is detected as described in paragraph (DD)(13)(f)(ii) of this rule, the leaking valve shall be repaired in accordance with paragraphs (DD)(2)(h) and (DD)(2)(i) of this rule.

6.n [OAC rule 3745-21-09(DD)(14)] Record keeping.

i. Each permittee of a process unit as described in paragraph (DD)(1) of this rule shall comply with the recordkeeping requirements of paragraphs (DD)(14)(b) to (DD)(14)(g) of this rule. A permittee of more than one process unit may use one recordkeeping system to comply with the recordkeeping requirements, provided the system identifies each record by each process unit.

ii. The following information shall be recorded in a log that is kept in a readily accessible location:

(1) A list of identification numbers for equipment subject to the requirements of paragraphs (DD)(2) to (DD)(10) of this rule;

(2) A list of identification numbers for equipment designated for no detectable emissions as provided in paragraph (DD)(7) of this rule, and a signature of the permittee authorizing such designation;

(3) A list of identification numbers for pressure relief devices subject to paragraph (DD)(4) of this rule;

(4) A list of identification numbers for closed vent systems subject to paragraph (DD)(9) of this rule; and

(5) For compliance tests required under paragraphs (DD)(4)(c), (DD)(7)(c), and (DD)(9)(c) of this rule:

(a) The date of each compliance test;

(b) The background level measured during each compliance test; and

(c) The maximum instrument reading measured at the equipment during each compliance test.

iii. The following information pertaining to valves subject to an alternative monitoring schedule, as provided in paragraph (DD)(2)(c) of this rule, shall be recorded in a log that is kept in a readily accessible location:

(1) A list of identification numbers for valves designated as unsafe to monitor, an explanation for each valve stating why the valve is unsafe to monitor, and the plan for monitoring each valve;

(2) A list of identification numbers for valves designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the schedule for monitoring each valve; and

(3) A list of identification numbers for valves subject to the alternative monitoring schedule based on a skip period, a schedule for monitoring, and the percentage of valves leaking during each monitoring period.

iv. The following information pertaining to closed vent systems and control equipment described in paragraphs (DD)(9) and (DD)(10) of this rule shall be recorded and kept in a readily accessible location:

(1) Detailed schematics, design specifications, and piping and instrumentation diagrams;

(2) The dates and descriptions of any changes in the design specifications;

(3) A description of the parameter or parameters monitored, as required in paragraph (DD)(10)(d) of this rule, to ensure that the control equipment is operated and maintained in conformance with its design, and an explanation of the reason for selecting such parameter or parameters;

(4) Periods when the closed vent systems and control equipment are not operated as designed, including periods when a flare pilot light does not have a flame; and

(5) Dates of startups and shutdowns of the closed vent systems and control equipment.

v. The following information pertaining to barrier fluid systems and sensors described in paragraph (DD)(8) of this rule shall be recorded in a log that is kept in a readily accessible location:

(1) A list of identification numbers of pumps and compressors equipped with such barrier fluid systems and sensors;

(2) The criteria that indicate failure of the seal system, the barrier fluid system, or both, as required in paragraph (DD)(8)(d) of this rule and an explanation of the criteria; and

(3) Any changes to such criteria and the reasons for the changes.

vi. The following information for use in determining an exemption for the process unit as provided in paragraph (DD)(17)(a) of this rule shall be recorded in a log that is kept in a readily accessible location:

(1) An analysis demonstrating the design capacity of the process unit;

(2) A statement listing the feed and raw materials and products from the process unit and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohols; or

(3) An analysis demonstrating that no equipment is in VOC service.

vii. The following information pertaining to specific equipment that are exempt as provided in paragraph (DD)(17)(b) of this rule shall be recorded in a log that is kept in a readily accessible location:

(1) A list of identification numbers of equipment in vacuum service;

(2) A list of identification numbers of equipment not in VOC service and the information or data used to demonstrate that the equipment is not in VOC service; and

(3) A list of equipment subject to an equivalent emission requirement that is approved by the director pursuant to paragraph (DD)(16) of this rule.

6.o [OAC rule 3745-21-09(DD)(15)] Reporting.

i. Each permittee of a process unit as described in paragraph (DD)(1) of this rule shall comply with the reporting requirements specified in paragraphs (DD)(15)(b) to (DD)(15)(d) of this rule.

ii. For compliance tests required under paragraphs (DD)(7)(c) and (DD)(9)(c) of this rule, the requirements of paragraphs (A)(3) and (A)(4) of rule 3745-21-10 of the Administrative Code (pertaining to notification of intent to test) shall be met. The results of such compliance tests shall be reported to the Ohio Environmental Protection Agency district office or delegate agency within thirty days after the test date.

iii. The results of compliance tests required under paragraph (DD)(4)(c) of this rule shall be reported semiannually to the Ohio Environmental Protection Agency district office or delegate agency. The semiannual reports shall be submitted by the first day of February and August and shall include information for the preceding semiannual period.

iv. Any semiannual reports required under paragraph (DD)(2)(m) of this rule may be sent to the Ohio Environmental Protection Agency district office or delegate agency.

6.p [OAC rule 3745-21-09(DD)(16)] Equivalent requirement.

i. Any permittee of a process unit may apply to the director for determination of an equivalent requirement in lieu of the requirements specified in paragraphs (DD)(2)to (DD)(10) of this rule. The determination of equivalence will be evaluated by the guidelines specified in paragraphs (DD)(16)(b) to (DD)(16)(d) of this rule. If the director approves an equivalent requirement for a process unit, said requirement shall be specified in the special terms and conditions of the permit to operate or variance issued by the director for the process unit.

ii. The permittee applying for a determination of equivalency shall be responsible for collecting and verifying test data to demonstrate the proposed equivalence.

iii. The equivalent requirement shall achieve a reduction in emissions of VOC at least equivalent to the reduction in emissions of VOC that would be achieved by compliance with the applicable requirements of paragraph (DD) of this rule.

iv. The director may condition the approval of equivalence as necessary to ensure the same emission reduction as the applicable requirements of paragraph (DD) of this rule.

6.q [OAC rule 3745-21-09(DD)(17)] Exemptions.

i. Exempted from the requirements of paragraphs (DD)(2) to (DD)(6) of this rule are the following process units:

(1) Any process unit that has a design capacity to produce less than one thousand one hundred tons per year;

(2) Any process unit that produces only heavy liquid chemicals from heavy liquid feed or raw materials;

(3) Any process unit that produces beverage alcohol;

(4) Any process unit that has no equipment in VOC service as determined in accordance with paragraph (O)(2) of rule 3745-21-10 of the Administrative Code; and

(5) Any process unit at a petroleum refinery, as defined in paragraph (E)(15) of rule 3745-21-01 of the Administrative Code.

ii. Exempted from the requirements of paragraphs (DD)(2) to (DD)(6) of this rule are the following equipment:

(1) Any equipment not in VOC service, as determined in accordance with paragraph (O)(2) of rule 3745-21-10 of the Administrative Code;

(2) Any equipment in vacuum service; and

(3) Any equipment subject to an equivalent emission limitation as provided in paragraph (DD)(16) of this rule.

7. [40 CFR 63, Subpart CC] Petroleum Refinery MACT Standards

7.a 40 CFR 63, subpart A provides applicability provisions, definitions, and other general provisions that are applicable to emissions units affected by 40 CFR 63.

7.b [40 CFR 63.642(c)]
Table 6 of 40 CFR 63, subpart CC specifies the provisions of 40 CFR 63, subpart A that apply and those that do not apply to permittees of sources subject to 40 CFR 63, subpart CC.

7.c [40 CFR 63.642(d)]
Initial performance tests and initial compliance determinations shall be required only as specified in this subpart.

i. Performance tests and compliance determinations shall be conducted according to the schedule and procedures specified in this subpart.

ii. The permittee shall notify the Administrator of the intention to conduct a performance test at least 30 days before the performance test is scheduled.

iii. Performance tests shall be conducted according to the provisions of 40 CFR 63.7(e) except that performance tests shall be conducted at maximum representative operating capacity for the process. During the performance test, the permittee shall operate the control device at either maximum or minimum representative operating conditions for monitored control device parameters, whichever results in lower emission reduction.

iv. Data shall be reduced in accordance with the EPA-approved methods specified in the applicable section or, if other test methods are used, the data and methods shall be validated according to the protocol in Method 301 of appendix A of this part.

7.d [40 CFR 63.642(e)]
Each permittee of a source subject to this subpart shall keep copies of all applicable reports and records required by this subpart for at least 5 years except as otherwise specified in this subpart. 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.

7.e [40 CFR 63.642(f)]
All reports required under this subpart shall be sent to the Administrator at the addresses listed in 40 CFR 63.13 of subpart A of this part. If acceptable to both the Administrator and the permittee of a source, reports may be submitted on electronic media.

7.f [40 CFR 63.642(g)]
The permittee of an existing source subject to the requirements of this subpart shall control emissions of organic HAP's to the level represented by the following equation:

EA = (0.02)EPV1 + EPV2 + (0.05)ES1 + ES2 + EGLR1C + EGLR2 + (R)EMV1 + EMV2 + EWW1C + EWW2

where:
EA = Emission rate, megagrams per year, allowed for the source.

(0.02)Sum of EPV1 = Sum of the residual emissions, megagrams per year, from all Group 1 miscellaneous process vents, as defined in 40 CFR 63.641.

Sum of EPV2 = Sum of the emissions, megagrams per year, from all Group 2 process vents, as defined in 40 CFR 63.641.

(0.05)Sum of ES1 = Sum of the residual emissions, megagrams per year, from all Group 1 storage vessels, as defined in 40 CFR 63.641.

Sum of ES2 = Sum of the emissions, megagrams per year, from all Group 2 storage vessels, as defined in 40 CFR 63.641.

Sum of EGLR1C = Sum of the residual emissions, megagrams per year, from all Group 1 gasoline loading racks, as defined in 40 CFR 63.641.

Sum of EGLR2 = Sum of the emissions, megagrams per year, from all Group 2 gasoline loading racks, as defined in 40 CFR 63.641.

(R)Sum of EMV1 = Sum of the residual emissions megagrams per year, from all Group 1 marine tank vessels, as defined in 40 CFR 63.641.

R = 0.03 for existing sources, 0.02 for new sources.

Sum of EMV2 = Sum of the emissions, megagrams per year from all Group 2 marine tank vessels, as defined in 40 CFR 63.641.

Sum of EWW1C = Sum of the residual emissions from all Group 1 wastewater streams, as defined in 40 CFR 63.641. This term is calculated for each Group 1 stream according to the equation for EWWic in 40 CFR 63.652(h)(6).

Sum of EWW2 = Sum of emissions from all Group 2 wastewater streams, as defined in 40 CFR 63.641.

7.g [40 CFR 63.642(g)] continued
The emissions level represented by this equation is dependent on the collection of emission points in the source. The level is not fixed and can change as the emissions from each emission point change or as the number of emission points in the source changes.

7.h [40 CFR 63.642(h)]
The permittee of a new source subject to the requirements of this subpart shall control emissions of organic HAP's to the level represented by the equation in paragraph (g) of 40 CFR 63.642.

7.i [40 CFR 63.642(i)]
The permittee of an existing source shall demonstrate compliance with the emission standard in paragraph (g) of 40 CFR 63.642 by following the procedures specified in paragraph (k) of 40 CFR 63.642 for all emission points.

7.j [40 CFR 63.642(j)]
The permittee of a new source shall demonstrate compliance with the emission standard in paragraph (h) of 40 CFR 63.642 only by following the procedures in paragraph (k) of 40 CFR 63.642. The permittee of a new source may not use the emissions averaging compliance approach.

7.k [40 CFR 63.642(k)]
The permittee of an existing source may comply, and the permittee of a new source shall comply, with the miscellaneous process vent provisions in 40 CFR 63.643 through 63.645, the storage vessel provisions in 40 CFR 63.646, and the wastewater provisions in 40 CFR 63.647. The

permittee is not required to comply with 40 CFR 63.650 or 40 CFR 63.651, since there are no gasoline loading racks nor any marine tank vessel loading operations at this facility.

i. The permittee using this compliance approach shall also comply with the requirements of 40 CFR 63.654 as applicable.

ii. The permittee using this compliance approach is not required to calculate the annual emission rate specified in paragraph (g) of 40 CFR 63.642.

7.l The permittee has not elected to use the emission averaging provisions in 40 CFR 63.642(l). Thus, the emissions averaging provisions specified in 40 CFR 63.652 are not applicable. The monitoring, recordkeeping and implementation plan requirements for emission averaging specified in 40 CFR 63.653 are also not applicable.

8. [40 CFR 63.643] Miscellaneous Process Vent Provisions - 40 CFR 63, subpart CC

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

i Reduce emissions of organic HAP's using a flare that meets the requirements of 40 CFR 63.11(b) of subpart A.

ii. 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.

8.b [40 CFR 63.643(b)]
If a boiler or process heater is used to comply with the percentage of reduction requirement or concentration limit specified in paragraph (a)(2) of 40 CFR 63.643, 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) and 40 CFR 63.645.

9. [40 CFR 63.644] Monitoring Provisions for Miscellaneous Process Vents

9.a [40 CFR 63.644(a) and (a)(1-3)]
Except as provided in paragraph (b) of 40 CFR 63.644, each 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 paragraph a(1), a(2), a(3), or a(4) of 40 CFR 63.644, depending on the type of combustion device used. All monitoring equipment shall be installed, calibrated, maintained, and operated according to manufacturer's specifications.

i Where an incinerator is used, a temperature monitoring device equipped with a continuous recorder is required. 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. Where a catalytic incinerator is used, temperature monitoring devices shall be installed in the gas stream immediately before and after the catalyst bed.

ii. 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.

iii. Any boiler or process heater with a design heat input capacity greater than or equal to 44 megawatts or any boiler or process heater in which all vent streams are introduced into the flame zone is exempt from monitoring.

iv. 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.

9.b [40 CFR 63.644(b) and (b)(1-2)]
A 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 63.654(h). Approval shall be requested if the permittee:

i uses a control device other than an incinerator, boiler, process heater, or flare; or

ii. uses one of the control devices listed in 40 CFR 63.644(a), but seeks to monitor a parameter other than those specified in 40 CFR 63.644(a).

9.c [40 CFR 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 paragraph (a) of 40 CFR 63.644 shall comply with either paragraph c(1) or c(2) of 40 CFR 63.644. 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 63.648 are not subject to this paragraph.

i [40 CFR 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 63.654(h) and (i). 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.

ii. [40 CFR 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.

9.d [40 CFR 63.644(d)]
The permittee shall establish a range that ensures compliance with the emissions standard for each parameter monitored under paragraphs (a) and (b) of 40 CFR 63.644. 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.

9.e [40 CFR 63.644(e)]
Each permittee of a control device subject to the monitoring provisions of this section 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 paragraphs (a) and (b) of 40 CFR 63.644. Operation of the control device in a manner that constitutes a period of excess emissions, as defined in 63.654(g)(6), or failure to perform procedures required by this section shall constitute a violation of the applicable emission standard of 40 CFR Part 63, Subpart CC.

10. [40 CFR 63.645] Test Methods and Procedures for Miscellaneous Process Vents

10.a [40 CFR 63.645(a)]
To demonstrate compliance with 40 CFR 63.643, the permittee shall follow 40 CFR 63.116 except for 40 CFR 63.116 (a)(1), (d) and (e) of subpart G of this part except as provided in paragraphs (b) through (d) and paragraph (i) of 40 CFR 63.645.

10.b [40 CFR 63.645(e)]
For purposes of determining the TOC emission rate, as specified under paragraph (f) of 40 CFR 63.645, the sampling site shall be after the last product recovery device (as defined in 40 CFR 63.641 of this subpart) (if any recovery devices are present) but prior to the inlet of any control device (as defined in 40 CFR 63.641 of this subpart) that is present, prior to any dilution of the process vent stream, and prior to release to the atmosphere.

i. Methods 1 or 1A of 40 CFR part 60, appendix A, as appropriate, shall be used for selection of the sampling site.

ii. No traverse site selection method is needed for vents smaller than 0.10 meter in diameter.

10.c [40 CFR 63.645(f)]
Except as provided in paragraph (g) of 40 CFR 63.645, a permittee seeking to demonstrate that a process vent TOC mass flow rate is less than 33 kilograms per day for an existing source or less than 6.8 kilograms per day for a new source in accordance with the Group 2 process vent definition of this subpart shall determine the TOC mass flow rate by the following procedures:

i. The sampling site shall be selected as specified in paragraph (e) of 40 CFR 63.645.

ii. The gas volumetric flow rate shall be determined using Methods 2, 2A, 2C, or 2D of 40 CFR part 60, appendix A, as appropriate.

iii. Method 18 or Method 25A of 40 CFR part 60, appendix A shall be used to measure concentration; alternatively, any other method or data that has been validated according to the protocol in Method 301 of appendix A of this part may be used. If Method 25A is used, and the TOC mass flow rate calculated from the Method 25A measurement is greater than or equal to 33 kilograms per day for an existing source or 6.8 kilograms per day for a new source, Method 18 may be used to determine any non-VOC hydrocarbons that may be deducted to calculate the TOC (minus non-VOC hydrocarbons) concentration and mass flow rate. The following procedures shall be used to calculate parts per million by volume concentration:

(1) The minimum sampling time for each run shall be 1 hour in which either an integrated sample or 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.

(2) The TOC concentration (CTOC) is the sum of the concentrations of the individual components and shall be computed for each run using the following equation if Method 18 is used:

CTOC = Sum, i=1 to n[Sum, j=1 to n(Cji)]/x

where:

CTOC = Concentration of TOC (minus methane and ethane), dry basis, parts per million by volume.

Cji = Concentration of sample component j of the sample i, dry basis, parts per million by volume.

n = Number of components in the sample.

x = Number of samples in the sample run.

iv. The emission rate of TOC (minus methane and ethane) (ETOC) shall be calculated using the following equation if Method 18 is used:

ETOC = K2[Sum, j=1 to n(Cj)(Mj)]Qs

where:

ETOC = Emission rate of TOC (minus methane and ethane) in the sample, kilograms per day.

K2 = Constant, (5.986)10^minus 5 (parts per million)^minus 1 (gram-mole per standard cubic meter)(kilogram per gram) (minute per day), where the standard temperature (standard cubic meter) is at 20 degrees Celsius.

Cj = Concentration on a dry basis of organic compound j in parts per million as measured by Method 18 of 40 CFR part 60, appendix A, as indicated in paragraph (f)(3) of 40 CFR 63.645. Cj includes all organic compounds measured minus methane and ethane.

Mj = Molecular weight of organic compound j, gram per gram-mole.

Qs = Vent stream flow rate, dry standard cubic meters per minute, at a temperature of 20 degrees Celsius.

v. If Method 25A is used, the emission rate of TOC (ETOC) shall be calculated using the following equation:

ETOC=(K2)(CTOC)(M)(Qs)

where:

ETOC = Emission rate of TOC (minus methane and ethane) in the sample, kilograms per day.

K2 = Constant, (5.986)10^minus 5 (parts per million)^minus 1 (gram-mole per standard cubic meter)(kilogram per gram) (minute per day), where the standard temperature (standard cubic meter) is at 20 degrees Celsius.

CTOC = Concentration of TOC on a dry basis in parts per million volume as measured by Method 25A of 40 CFR part 60, appendix A, as indicated in paragraph (f)(3) of 40 CFR 63.645.

M = Molecular weight of organic compound used to express units of CTOC, gram per gram-mole.

Qs = Vent stream flow rate, dry standard cubic meters per minute, at a temperature of 20 degrees Celsius.

10.d [40 CFR 63.645(g)]
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:

(1) Use of material balances based on process stoichiometry to estimate maximum TOC concentrations;

(2) Estimation of maximum flow rate based on physical equipment design such as pump or blower capacities; and

(3) Estimation of TOC concentrations based on saturation conditions.

v. All data, assumptions, and procedures used in the engineering assessment shall be documented.

10.e [40 CFR 63.645(h)]
The permittee of a Group 2 process vent shall recalculate the TOC emission rate for each 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.

i The TOC emission rate shall be recalculated based on measurements of vent stream flow rate and TOC as specified in paragraphs (e) and (f) of 40 CFR 63.645, as applicable, or on best engineering assessment of the effects of the change. Engineering assessments shall meet the specifications in paragraph (g) of 40 CFR 63.645.

ii. Where the recalculated TOC emission rate 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) and shall comply with the appropriate provisions in 40 CFR 63.643 by the dates specified in 40 CFR 63.640.

10.f [40 CFR 63.645(i)]
A compliance determination for visible emissions shall be conducted within 150 days of the compliance date using Method 22 of 40 CFR part 60, appendix A, to determine visible emissions.

11. [40 CFR 63.116] Process Vent Performance Test Methods

11.a [40 CFR 63.116(a) and (a)(2)]
When a flare is used to comply with 40 CFR 63.643(a)(1), 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.

11.b [40 CFR 63.116(b)]
The permittee is not required to conduct a performance test when any control device specified in paragraphs (1) through (5) of 40 CFR 63.116(b) is used.

i [40 CFR 63.116(b)(1)]
Any boiler or process heater with a design heat input capacity of 44 megawatts or greater.

ii. [40 CFR 63.116(b)(2)]
Any boiler or process heater in which all vent streams are introduced into the flame zone.

iii. [40 CFR 63.116(b)(3)]
A control device for which a performance test was conducted for determining compliance with a regulation promulgated by the U.S. 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. [40 CFR 63.116(b)(4)]
A boiler or process heater burning hazardous waste.

v. [40 CFR 63.116(b)(5)]
A hazardous waste incinerator for which the permittee has been issued a final permit under 40 CFR 270 complies with the requirements of 40 CFR 264, subpart O, or has certified compliance with the interim status requirements of 40 CFR 264, subpart O.

11.c [40 CFR 63.116(c)]
Except as provided in 40 CFR 63.116(a) and (b), the permittee using a control device to comply with the organic HAP concentration limit or percent reduction efficiency requirements in 63.116(a)(2) shall conduct a performance test using the procedures in 63.116(c)(1) through (c)(4). 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.

11.d [40 CFR 63.116(c)(1)]
Method 1 or Method 1A of 40 CFR 60, appendix A, as appropriate, shall be used for selection of the sampling sites.

i For determination of compliance with the 98 percent reduction of total organic HAP requirement of 40 CFR 63.643(a)(2) sampling sites shall be located at the inlet of the control device as specified below, and at the outlet of the control device.

(1) The control device inlet sampling site shall be located after the final product recovery device.

(2) 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.

ii. For determination of compliance with the 20 parts per million by volume total organic HAP limit in 63.643(a)(2), the sampling site shall be located at the outlet of the control device.

11.e [40 CFR 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.

11.f [40 CFR 63.116(c)(3)]
To determine compliance with the 20 parts per million by volume total organic HAP limit in 63.643(a)(2), the permittee shall use Method 18 of 40 CFR 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 60, may be used. The following procedures shall be used to calculate parts per million by volume concentration, corrected to 3 percent oxygen:

i 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.

ii. 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.

iii. The concentration of TOC or total organic HAP shall be corrected to 3 percent oxygen if a combustion device is the control device.

(1) The emission rate correction factor or excess air, integrated sampling and analysis procedures of Method 3B of 40 CFR 60, appendix A, shall be used to determine the oxygen concentration (%O2d). The samples shall be taken during the same time that the TOC (minus methane or ethane) or total organic HAP samples are taken.

(2) The concentration corrected to 3 percent oxygen (Cc) shall be computed using either of the equations found in 40 CFR 63.116(c)(3)(iii)(B) of subpart G.

11.g [40 CFR 63.116(c)(4)]
To determine compliance with the 98 percent reduction requirement of 63.643(a)(2), the permittee shall use Method 18 of 40 CFR 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 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.

12. [40 CFR 63.646] Storage Vessel Provisions

12.a [40 CFR 63.646(a)]
Each permittee of a Group 1 storage vessel subject to this subpart shall comply with the requirements of 40 CFR 63.119 through 63.121 except as provided in paragraphs (b) through (l) of 40 CFR 63.646.

12.b [40 CFR 63.646(b)]
As used in this section, 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 of this part.

i A 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.

ii. When a 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 source or above or below 2 percent for a storage vessel at a new source, Method 18 of 40 CFR part 60, appendix A shall be used.

12.c [40 CFR 63.646(c)]
The following paragraphs do not apply to storage vessels at existing sources subject to this subpart: 40 CFR 63.119(b)(5), (b)(6), (c)(2), and (d)(2).

12.d [40 CFR 63.646(d)]
References shall apply as specified in paragraphs (d)(1) through (d)(10) of 40 CFR 63.646.

12.e [40 CFR 63.646(e)]
When complying with the inspection requirements of 40 CFR 63.120 of subpart G of this part, permittees of storage vessels at existing sources subject to this subpart are not required to comply with the provisions for gaskets, slotted membranes, and sleeve seals.

12.f [40 CFR 63.646(f)]
The following paragraphs apply to Group 1 storage vessels at existing sources:

i 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.

ii. 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.

iii. 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.

12.g [40 CFR 63.646(g)]
Failure to perform inspections and monitoring required by this section shall constitute a violation of the applicable standard of this subpart.

12.h [40 CFR 63.646(h) through 40 CFR 63.646(k)]
Reference requirements are listed in each section as applicable.

12.i [40 CFR 63.646(l)]
The Ohio EPA 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 subject to this subpart. The Ohio EPA 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 or for individual storage vessels on a case-by-case basis.

13. [40 CFR 63.647] Wastewater Provisions

13.a [40 CFR 63.647(a)]
Except as provided in paragraph (b) of 40 CFR 63.647, each permittee of a Group 1 wastewater stream shall comply with the requirements of 40 CFR 61.340 through 61.355 of 40 CFR part 61, subpart FF for each process wastewater stream that meets the following definition in 40 CFR 63.641:

Group 1 wastewater stream means a wastewater stream at a petroleum refinery with a total annual benzene loading of 10 megagrams per year or greater as calculated according to the procedures in 40 CFR 61.342 of subpart FF of part 61 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.

13.b [40 CFR 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 part 61, subpart FF, 40 CFR 61.341.

13.c [40 CFR 63.647(c)]
Each permittee required under subpart FF of 40 CFR part 61 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 subpart FF of 40 CFR part 61 shall constitute a violation of the standard.

14. [40 CFR 63.648] Equipment Leak Standards

14.a [40 CFR 63.648(a)]
In accordance with 40 CFR 63, subpart CC, the permittee shall comply with the provisions of 40 CFR part 60 subpart VV and paragraph (b) of 40 CFR 63.648 except as provided in paragraphs i. and ii. below, and paragraphs (c) through (i) of 40 CFR 63.648. Each permittee of a new source subject to the provisions of this subpart shall comply with subpart H of this part except as provided in paragraphs (c) through (i) of 40 CFR 63.648.

i 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 of this subpart.

ii. Calculation of percentage leaking equipment components for subpart VV of 40 CFR part 60 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.

14.b [40 CFR 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 this part and paragraph (c) of 40 CFR 63.648 (i.e., quarterly or semiannually) is governed by the requirements of paragraphs (b)(1) and (b)(2) of 40 CFR 63.648.

i. Monitoring data must meet the test methods and procedures specified in 40 CFR 60.485(b) of 40 CFR part 60, subpart VV or 40 CFR 63.180(b)(1) through (b)(5) of subpart H of this part except for minor departures.

ii. Departures from the criteria specified in 40 CFR 60.485(b) of 40 CFR part 60 subpart VV or 40 CFR 63.180(b)(1) through (b)(5) of subpart H of this part or from the monitoring frequency specified in subpart VV or in paragraph (c) of 40 CFR 63.648 (such as every 6 weeks instead of monthly or quarterly) 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.

14.c [40 CFR 63.648(c)]
In lieu of complying with the existing source provisions of paragraph (a) in 40 CFR 63.648, a 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 this part except as provided in paragraphs (c)(1) through (c)(10) and (e) through (i) of 40 CFR 63.648.

i. The instrument readings that define a leak for light liquid pumps subject to 40 CFR 63.163 of subpart H of this part and gas/vapor and light liquid valves subject to 40 CFR 63.168 of subpart H of this part are specified in table 2 of this subpart.

ii. 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.

(1) If the permittee does not elect to monitor connectors, then the permittee shall monitor valves according to the frequency specified in table 8 of this subpart.

(2) If a permittee elects to monitor connectors according to the provisions of 40 CFR 63.648, paragraphs (b), (c), or (d), then the permittee shall monitor valves at the frequencies specified in table 9 of this subpart.

iii. 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) 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.

[40 CFR 63.648(c)] continued

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

v. 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 this part (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.

vi. In phase III of the pump standard, except as provided in paragraph (c)(7) of 40 CFR 63.648, 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.

vii. 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.

viii. A permittee may make the election described in paragraphs (c)(3) and (c)(4) of 40 CFR 63.648 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 part 70 of this chapter.

14.e ix. 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.

x. 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 a 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 this part.

14.f [40 CFR 63.648(d)]
Upon startup of new sources, the permittee shall comply with 40 CFR 63.163(a)(1)(ii) of subpart H of this part for light liquid pumps and 40 CFR 63.168(a)(1)(ii) of subpart H of this part for gas/vapor and light liquid valves.

14.g [40 CFR 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 of subpart H of this part.

14.h [40 CFR 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.

14.i [40 CFR 63.648(g)]
Compressors in hydrogen service are exempt from the requirements of paragraphs (a) and (c) of 40 CFR 63.448 if a permittee demonstrates that a compressor is in hydrogen service.

i. Each compressor is presumed not to be in hydrogen service unless a permittee demonstrates that the piece of equipment is in hydrogen service.

ii. 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.

(1) 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:

(a) Procedures that conform to those specified in 40 CFR 60.593(b)(2) of 40 part 60, subpart GGG.

(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.

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

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

14.j [40 CFR 63.648(h)]
Each permittee of a source subject to the provisions of this subpart must maintain all records for a minimum of 5 years.

14.k [40 CFR 63.648(i)]
Reciprocating compressors are exempt from seal requirements if recasting the distance piece or compressor replacement is required.

15. [40 CFR 63.649] Alternative Means of Emission Limitation: Connectors in Gas/Vapor Service and Light Liquid Service

15.a [40 CFR 63.649(a)]
If a 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.

15.b [40 CFR 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.

i. 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.

ii. The instrument reading that defines a leak is 1,000 parts per million.

iii. 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.

iv. If a leak is detected, the connector shall be monitored for leaks within the first 3 months after its repair.

v. 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.

(1) 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.

(2) 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.

(3) 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.

(4) 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.

vi. 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.

15.c [40 CFR 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.

i. 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.

ii. 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.

iii. 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.

iv. 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.

v. 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.

(1) If the percentage leaking connectors is 2.0 percent or greater, the permittee shall monitor or inspect, as applicable, the connectors once per year.

(2) 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.

(3) 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.

vi. 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.

(1) The percentage leaking connectors shall be calculated as follows:

$$\% CL=[(CL - CAN)/Ct + Cc)] \times 100$$

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=0.67 x net 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.

(2) 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.

(3) 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.

vii. 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.

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

15.e [40 CFR 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.

i. Delay of repair is allowed for equipment that is isolated from the process and that does not remain in organic HAP service.

ii. Delay of repair for connectors is also allowed if:

(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

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

15.f [40 CFR 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:

i. 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

ii. The connector will be repaired before the end of the next scheduled process unit shutdown.

15.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.

16. [40 CFR 63.654] Reporting and Recordkeeping Requirements

16.a [40 CFR 63.654(a)]
Each permittee subject to the wastewater provisions in 40 CFR 63.647 shall comply with the recordkeeping and reporting provisions in 40 CFR 61.356 and 61.357 of 40 CFR part 61, subpart FF unless they are complying with the wastewater provisions specified in paragraph (o)(2)(ii) of 40 CFR 63.640. There are no additional reporting and recordkeeping requirements for wastewater under this subpart since the facility is not using the emissions averaging provisions in 40 CFR 63.652.

16.b [40 CFR 63.654(d)]
Each permittee subject to the equipment leaks standards in 40 CFR 63.648 shall comply with the recordkeeping and reporting provisions in paragraphs (d)(1) through (d)(6) of 40 CFR 63.654.

i. Sections 60.486 and 60.487 of subpart VV of part 60 except as specified in paragraph (d)(1)(i) of 40 CFR 63.654 or 40 CFR 63.181 and 40 CFR 63.182 of subpart H of this part except for 40 CFR 63.182(b), (c)(2), and (c)(4).

(1) 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.

ii. 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 this part are summarized in table 3 of this subpart.

iii. A 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.

iv. A permittee must keep a list of identification numbers for valves that are designated as leakless per 40 CFR 63.648(c)(10).

v. A 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 this subpart.

vi. A 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).

16.c [40 CFR 63.654(e)]
Each permittee of a source subject to this subpart shall submit the reports listed in paragraphs (e)(1) through (e)(3) of 40 CFR 63.654 except as provided in paragraph (h)(5) of 40 CFR 63.654, and shall keep records as described in paragraph (i) of 40 CFR 63.654.

i. A Notification of Compliance Status report as described in paragraph (f) of 40 CFR 63.654;

ii. Periodic Reports as described in paragraph (g) of 40 CFR 63.654; and

iii. Other reports as described in paragraph (h) of 40 CFR 63.654.

16.d [40 CFR 63.654(f)]
Each permittee of a source subject to this subpart shall submit a Notification of Compliance Status report within 150 days after the compliance dates specified in 40 CFR 63.640(h) with the exception of Notification of Compliance Status reports submitted to comply with 40 CFR 63.640(l)(3) and for storage vessels subject to the compliance schedule specified in 40 CFR 63.640(h)(4). Notification of Compliance Status reports required by 40 CFR 63.640(l)(3) and for storage vessels subject to the compliance dates specified in 40 CFR 63.640(h)(4) shall be submitted according to paragraph (f)(6) of 40 CFR 63.654. This information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, or in any combination of the three. If the required information has been submitted before the date 150 days after the compliance date specified in 40 CFR 63.640(h), a separate Notification of Compliance Status report is not required within 150 days after the compliance dates specified in 40 CFR 63.640(h). If a permittee submits the information specified in paragraphs (f)(1) through (f)(5) of 40 CFR 63.654 at different times, and/or in different

submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the previously submitted information.

i. The Notification of Compliance Status report shall include the information specified in paragraphs (f)(1)(i) through (f)(1)(v) of 40 CFR 63.654.

(1) For storage vessels, this report shall include the information specified in paragraphs (f)(1)(i)(A) through (f)(1)(i)(D) of 40 CFR 63.654.

(a) Identification of each storage vessel subject to this subpart, and for each Group 1 storage vessel subject to this subpart, the information specified in paragraphs (f)(1)(i)(A)(1) through (f)(1)(i)(A)(3) of 40 CFR 63.654. This information is to be revised each time a Notification of Compliance Status report is submitted for a storage vessel subject to the compliance schedule specified in 40 CFR 63.640(h)(4) or to comply with 40 CFR 63.640(l)(3).

(i) For each Group 1 storage vessel complying with 40 CFR 63.646 that is not included in an emissions average, the method of compliance (i.e., internal floating roof, external floating roof, or closed vent system and control device).

(ii) For storage vessels subject to the compliance schedule specified in 40 CFR 63.640(h)(4) that are not complying with 40 CFR 63.646, the anticipated compliance date.

(iii) For storage vessels subject to the compliance schedule specified in 40 CFR 63.640(h)(4) that are complying with 40 CFR 63.646 and the Group 1 storage vessels described in 40 CFR 63.640(l), the actual compliance date.

(b) If a closed vent system and a control device other than a flare is used to comply with 40 CFR 63.646 the permittee shall submit:

(i) A description of the parameter or parameters to be monitored to ensure that the control device is being properly operated and maintained, an explanation of the criteria used for selection of that parameter (or parameters), and the frequency with which monitoring will be performed; and either

(ii) The design evaluation documentation specified in 40 CFR 63.120(d)(1)(i) of subpart G, if the permittee elects to prepare a design evaluation; or

(iii) If the permittee elects to submit the results of a performance test, identification of the storage vessel and control device for which the performance test will be submitted, and identification of the

emission point(s) that share the control device with the storage vessel and for which the performance test will be conducted.

(c) If a closed vent system and control device other than a flare is used, the permittee shall submit:

(i) The operating range for each monitoring parameter. The specified operating range shall represent the conditions for which the control device is being properly operated and maintained.

(ii) If a performance test is conducted instead of a design evaluation, results of the performance test demonstrating that the control device achieves greater than or equal to the required control efficiency. A performance test conducted prior to the compliance date of this subpart can be used to comply with this requirement, provided that the test was conducted using EPA methods and that the test conditions are representative of current operating practices.

(d) If a closed vent system and a flare is used, the permittee shall submit:

(i) Flare design (e.g., steam-assisted, air-assisted, or nonassisted);

(ii) All visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the compliance determination required by 40 CFR 63.120(e) of subpart G of this part; and

(iii) All periods during the compliance determination when the pilot flame is absent.

ii. For miscellaneous process vents, identification of each miscellaneous process vent subject to this subpart, whether the process vent is Group 1 or Group 2, and the method of compliance for each Group 1 miscellaneous process vent that is not included in an emissions average (e.g., use of a flare or other control device meeting the requirements of 40 CFR 63.643(a)).

iii. For miscellaneous process vents controlled by control devices required to be tested under 40 CFR 63.645 of this subpart and 40 CFR 63.116(c) of subpart G of this part, performance test results including the information in paragraphs (f)(1)(iii)(A) and (B) of 40 CFR 63.654. Results of a performance test conducted prior to the compliance date of this subpart can be used provided that the test was conducted using the methods specified in 40 CFR 63.645 and that the test conditions are representative of current operating conditions.

(1) The percentage of reduction of organic HAP's or TOC, or the outlet concentration of organic HAP's or TOC (parts per million by volume on a dry basis corrected to 3 percent oxygen), determined as specified in 40 CFR 63.116(c) of subpart G of this part; and

(2) The value of the monitored parameters specified in table 10 of this subpart, or a site-specific parameter approved by the permitting authority, averaged over the full period of the performance test.

iv. For miscellaneous process vents controlled by flares, performance test results including the information in paragraphs (f)(1)(iv)(A) and (B) of 40 CFR 63.654;

(1) All visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the compliance determination required by 40 CFR 63.645 of this subpart and 40 CFR 63.116(a) of subpart G of this part, and

(2) A statement of whether a flame was present at the pilot light over the full period of the compliance determination.

v. For equipment leaks complying with 40 CFR 63.648(c) (i.e., complying with the requirements of subpart H of this part), the Notification of Compliance Report Status report information required by 40 CFR 63.182(c) of subpart H and whether the percentage of leaking valves will be reported on a process unit basis or a sourcewide basis.

vi. If initial performance tests are required by 40 CFR 63.643 through 63.653 of this subpart, the Notification of Compliance Status report shall include one complete test report for each test method used for a particular source.

(1) For additional tests performed using the same method, the results specified in paragraph (f)(1) of 40 CFR 63.654 shall be submitted, but a complete test report is not required.

(2) A complete test report shall include a sampling site description, 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.

(3) Performance tests are required only if specified by 40 CFR 63.643 through 63.653 of this subpart. Initial performance tests are required for some kinds of emission points and controls. Periodic testing of the same emission point is not required.

vii. For each monitored parameter for which a range is required to be established under 40 CFR 63.120(d) of subpart G of this part for storage vessels or 40 CFR 63.644 for miscellaneous process vents, the Notification of Compliance Status report shall include the information in paragraphs (f)(3)(i) through (f)(3)(iii) of 40 CFR 63.654.

(1) The specific range of the monitored parameter(s) for each emission point;

(2) The rationale for the specific range for each parameter for each emission point, including any data and calculations used to develop the range and a description of why the range ensures compliance with the emission standard.

(a) If a performance test is required by this subpart for a control device, the range shall be based on the parameter values measured during the performance test supplemented by engineering assessments and manufacturer's recommendations. Performance testing is not required to be conducted over the entire range of permitted parameter values.

(b) If a performance test is not required by this subpart for a control device, the range may be based solely on engineering assessments and manufacturers' recommendations.

(3) A definition of the source's operating day for purposes of determining daily average values of monitored parameters. The definition shall specify the times at which an operating day begins and ends.

(4) Results of any continuous monitoring system performance evaluations shall be included in the Notification of Compliance Status report.

viii. Notification of Compliance Status reports required by 40 CFR 63.640(l)(3) and for storage vessels subject to the compliance dates specified in 40 CFR 63.640(h)(4) shall be submitted no later than 60 days after the end of the 6-month period during which the change or addition was made that resulted in the Group 1 emission point or the existing Group 1 storage vessel was brought into compliance, and may be combined with the periodic report. Six-month periods shall be the same 6-month periods specified in paragraph (g) of 40 CFR 63.654. The Notification of Compliance Status report shall include the information specified in paragraphs (f)(1) through (f)(5) of 40 CFR 63.654. This information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, as part of the periodic report, or in any combination of these four. If the required information has been submitted before the date 60 days after the end of the 6-month period in which the addition of the Group 1 emission point took place, a separate Notification of Compliance Status report is not required within 60 days after the end of the 6-month period. If a permittee submits the information specified in paragraphs (f)(1) through (f)(5) of 40 CFR 63.654 at different times, and/or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the previously submitted information.

16.e [40 CFR 63.654(g)]
The permittee of a source subject to this subpart 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 (g)(1) through (g)(6) of 40 CFR 63.654 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 paragraphs (g)(1) through (g)(6) of 40 CFR 63.654 occurred during the 6-month period. Since the facility is not using emissions averaging provisions, quarterly reporting requirements in 40 CFR 63.654(g)(8) are not applicable. 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 paragraphs (g)(1) through (g)(7) of 40 CFR 63.654.

i. For storage vessels, Periodic Reports shall include the information specified for Periodic Reports in paragraph (g)(2) through (g)(5) of 40 CFR 63.654 except that information related to gaskets, slotted membranes,and sleeve seals is not required for storage vessels that are part of an existing source.

ii. A permittee who elects to comply with 40 CFR 63.646 by using a fixed roof and an internal floating roof or by using an external floating roof converted to an internal floating roof shall submit the results of each inspection conducted in accordance with 40 CFR 63.120(a) of subpart G of this part in which a failure is detected in the control equipment.

(1) For vessels for which annual inspections are required under 40 CFR 63.120(a)(2)(i) or (a)(3)(ii) of subpart G of this part, the specifications and requirements listed in paragraphs (g)(2)(i)(A) through (g)(2)(i)(C) of 40 CFR 63.654 apply.

(a) 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, tears, or other openings in the seal or seal fabric; or there are visible gaps between the seal and the wall of the storage vessel.

(b) Except as provided in paragraph (g)(2)(i)(C) of 40 CFR 63.654, 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.

(c) If an extension is utilized in accordance with 40 CFR 63.120(a)(4) of subpart G of this part, 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 of this part; and describe the date the storage vessel was emptied and the nature of and date the repair was made.

For vessels for which inspections are required under 40 CFR 63.120(a)(2)(ii), (a)(3)(i), or (a)(3)(iii) of subpart G of this part (i.e., internal inspections), the specifications and requirements listed in paragraphs (g)(2)(ii)(A) and (g)(2)(ii)(B) of 40 CFR 63.654 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; 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 a 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.

iii. A permittee who elects to comply with 40 CFR 63.646 by using an external floating roof shall meet the periodic reporting requirements specified in paragraphs (g)(3)(i) through (g)(3)(iii) of 40 CFR 63.654.

(1) 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) of subpart G of this part in which the seal and seal gap requirements of 40 CFR 63.120(b)(3), (b)(4), (b)(5), or (b)(6) of subpart G of this part are not met. This documentation shall include the information specified in paragraphs (g)(3)(i)(A) through (g)(3)(i)(D) of 40 CFR 63.654.

(a) The date of the seal gap measurement.

(b) The raw data obtained in the seal gap measurement and the calculations described in 40 CFR 63.120(b)(3) and (b)(4) of subpart G of this part.

(c) A description of any seal condition specified in 40 CFR 63.120(b)(5) or (b)(6) of subpart G of this part that is not met.

(d) A description of the nature of and date the repair was made, or the date the storage vessel was emptied.

(2) If an extension is utilized in accordance with 40 CFR 63.120(b)(7)(ii) or (b)(8) of subpart G of this part, 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) of subpart G of this part, as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

(3) The permittee shall submit, as part of the Periodic Report, documentation of any failures that are identified during visual inspections required by 40 CFR 63.120(b)(10) of subpart G of this part. This documentation shall meet the specifications and requirements in paragraphs (g)(3)(iii)(A) and (g)(3)(iii)(B) of 40 CFR 63.654.

(a) 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.

(b) 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.

iv. A permittee who elects to comply with 40 CFR 63.646 by using an external floating roof converted to an internal floating roof shall comply with the periodic reporting requirements of paragraph (g)(2) of 40 CFR 63.654.

v. A permittee who elects to comply with 40 CFR 63.646 by installing a closed vent system and control device shall submit, as part of the next Periodic Report, the information specified in paragraphs (g)(5)(i) through (g)(5)(iii) of 40 CFR 63.654.

(1) The Periodic Report shall include the information specified in paragraphs (g)(5)(i)(A) and (g)(5)(i)(B) of 40 CFR 63.654 for those planned routine maintenance operations that would require the control device not to meet the requirements of 40 CFR 63.119(e)(1) or (e)(2) of subpart G of this part, as applicable.

(a) A description of the planned routine maintenance that is anticipated to be performed for the control device during the next 6 months. This description shall include the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods.

(b) A description of the planned routine maintenance that was performed for the control device during the previous 6 months. This description shall include the type of maintenance performed and the total number of hours during those 6 months that the control device did not meet the requirements of 40 CFR 63.119 (e)(1) or (e)(2) of subpart G of this part, as applicable, due to planned routine maintenance.

(c) If a control device other than a flare is used, the Periodic Report shall describe each occurrence when the monitored parameters were outside of the parameter ranges documented in the Notification of Compliance Status report. The description shall include: Identification of the control device for which the measured parameters were outside of the established ranges, and causes for the measured parameters to be outside of the established ranges.

(d) If a flare is used, the Periodic Report shall describe each occurrence when the flare does not meet the general control device requirements specified in 40 CFR 63.11(b) of subpart A of this part and shall include: Identification of the flare that does not meet the general requirements specified in 40 CFR 63.11(b) of subpart A of this part, and reasons the flare did not meet the general requirements specified in 40 CFR 63.11(b) of subpart A of this part.

vi. For miscellaneous process vents for which continuous parameter monitors are required by this subpart, periods of excess emissions shall be identified in the Periodic Reports and shall be used to determine compliance with the emission standards.

(1) Period of excess emission means any of the following conditions:

(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.

(b) An operating day when all pilot flames of a flare are absent.

(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.

(d) For data compression systems approved under paragraph (h)(5)(iii) of 40 CFR 63.654, 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.

(e) For miscellaneous process vents, excess emissions shall be reported for the operating parameters specified in table 10 of this subpart unless other site-specific parameter(s) have been approved by the operating permit authority.

(f) Periods of startup and shutdown that meet the definition of 40 CFR 63.641, and malfunction that meet the definition in 40 CFR 63.2 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.

vii. If a performance test for determination of compliance for a new emission point subject to this subpart 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.

(1) 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.

(2) The complete test report shall be maintained onsite.

16.f [40 CFR 63.654(h)]
The following reports shall be submitted as specified in 40 CFR 63 subpart A and as follows:

i. 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; and

ii. For storage vessels, notifications of inspections as specified in paragraphs (h)(2)(i) and (h)(2)(ii) of 40 CFR 63.654;

(1) 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) Except as provided in paragraphs (h)(2)(i) (B) and (C) of 40 CFR 63.654, 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) Except as provided in paragraph (h)(2)(i)(C) of 40 CFR 63.654, if the internal inspection required by 40 CFR 63.120(a)(2), 63.120(a)(3), or 63.120(b)(10) of subpart G of this part 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) The State or local permitting authority can waive the notification requirements of paragraphs (h)(2)(i)(A) and/or (h)(2)(i)(B) of 40 CFR 63.654 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 notification required by paragraph (h)(2)(i)(A) of 40 CFR 63.654, or sooner than 7 days after submitting the notification required by paragraph (h)(2)(i)(B) of 40 CFR 63.654 for all storage vessels, or for individual storage vessels on a case-by-case basis.

(2) In order to afford the Administrator the opportunity to have an observer present, the permittee of a storage vessel equipped with an external floating roof shall notify the Administrator of any seal gap measurements. The notification shall be made in writing at least 30 calendar days in advance of any gap measurements required by 40 CFR 63.120 (b)(1) or (b)(2) of subpart G of this part. The State or local permitting authority can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

(3) The requirements specified in 40 CFR 63.654(h)(3) are not applicable since the facility does not use emissions averaging.

(4) The permittee who requests approval to monitor a different parameter than those listed in 40 CFR 63.644 for miscellaneous process vents shall submit the information specified in paragraphs (h)(4)(i) through (h)(4)(iii) of 40 CFR 63.654. 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) of subpart A 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) 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).

(i) 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 paragraphs (e) and (f) of 40 CFR 63.654.

(ii) 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 paragraph (g)(6) of 40 CFR 63.654, will not be identified in Periodic Reports required under paragraphs (e) and (g) of 40 CFR 63.654. The rationale for the proposed monitoring, recording, and reporting system shall be included.

(5) A permittee may request approval to use alternatives to the continuous operating parameter monitoring and recordkeeping provisions listed in paragraph (i) of 40 CFR 63.654.

(a) 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 (h)(5)(iv) of 40 CFR 63.654, as applicable.

(b) The provisions in 40 CFR 63.8(f)(5)(i) of subpart A of this part shall govern the review and approval of requests.

(c) A 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.

(i) The requested system shall be designed to:

1) Measure the operating parameter value at least once every hour.

2) Record at least 24 values each day during periods of operation.

3) Record the date and time when monitors are turned off or on.

4) Recognize unchanging data that may indicate the monitor is not functioning properly, alert the permittee, and record the incident.

5) Compute daily average values of the monitored operating parameter based on recorded data.

(ii) 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 paragraph (h)(5)(iii)(A) of 40 CFR 63.654.

(iii) A 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 this part.

(6) The permittee shall submit the information specified in paragraphs (h)(6)(i) through (h)(6)(iii) of 40 CFR 63.654, 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 of this part. The information may be submitted in an operating permit application, in an amendment to an operating permit application, or in a separate submittal.

(a) The determination of applicability of this subpart to petroleum refining process units that are designed and operated as flexible operation units.

(b) The determination of applicability of this subpart to any storage vessel for which use varies from year to year.

(c) The determination of applicability of this subpart to any distillation unit for which use varies from year to year.

16.g [40 CFR 63.654(i)] Record Keeping

i. Each permittee subject to the storage vessel provisions in 40 CFR 63.646 shall keep the records specified in 40 CFR 63.123 of subpart G of this part except as specified in paragraphs (i)(1)(i) through (i)(1)(iv) of 40 CFR 63.654.

(1) Records related to gaskets, slotted membranes, and sleeve seals are not required for storage vessels within existing sources.

(2) All references to 40 CFR 63.122 in 40 CFR 63.123 of subpart G of this part shall be replaced with 40 CFR 63.654(e),

(3) 40 CFR 63.654(i)(1)(iii) is not applicable since the facility does not use emissions averaging.

(4) 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 or 2 percent for new sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.

ii. Each permittee required to report the results of performance tests under paragraphs (f) and (g)(7) of 40 CFR 63.654 shall retain a record of all reported results as well as a complete test report, as described in paragraph (f)(2)(ii) of 40 CFR 63.654 for each emission point tested.

[40 CFR 63.654(i)] continued

iii. Each permittee required to continuously monitor operating parameters under 40 CFR 63.644 for miscellaneous process vents shall keep the records specified in paragraphs (i)(3)(i) through (i)(3)(v) of 40 CFR 63.654 unless an alternative recordkeeping system has been requested and approved under paragraph (h) of 40 CFR 63.654.

(1) The monitoring system shall measure data values at least once every hour.

(2) The permittee shall record either:

(a) Each measured data value; or

(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.

(3) Daily average values of each continuously monitored parameter shall be calculated for each operating day and retained for 5 years except as specified in paragraph (i)(3)(iv) of 40 CFR 63.654.

(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.

(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.

(4) 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 paragraph (i)(3)(ii) of 40 CFR 63.654 shall also be retained for 5 years.

(5) 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 this subpart. 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.

iv. All other information required to be reported under paragraphs (a) through (h) of 40 CFR 63.654 shall be retained for 5 years.

17. [40 CFR 63.123(a)] Record Keeping
Each permittee of a Group 1 or Group 2 storage vessel 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 or Group 2 status and is in operation. For each Group 2 storage vessel, the permittee is not required to comply with any other provisions of 40 CFR 63.119 through 63.123 of this subpart other than those required by this paragraph unless such vessel is part of an emissions average as described in 40 CFR 63.150 of this subpart.

18. [40 CFR 63.640] Applicability and Designation of Affected Source
The permittee shall follow the procedures specified in paragraphs (e)(1) and (e)(2) of 40 CFR 63.640 to determine whether a storage vessel is part of a source to which this subpart applies.

18.a [40 CFR 63.640(e)]

i. Where a storage vessel is used exclusively by a process unit, the storage vessel shall be considered part of that process unit.

(1) If the process unit is a petroleum refining process unit subject to this subpart, then the storage vessel is part of the affected source to which this subpart applies.

(2) If the process unit is not subject to this subpart, then the storage vessel is not part of the affected source to which this subpart applies.

ii. If a storage vessel is not dedicated to a single process unit, then the applicability of this subpart shall be determined according to the provisions in paragraphs (e)(2)(i) through (e)(2)(iii) of 40 CFR 63.640.

(1) If a storage vessel is shared among process units and one of the process units has the predominant use, as determined by paragraphs (e)(2)(i)(A) and (e)(2)(i)(B) of 40 CFR 63.640, then the storage vessel is part of that process unit.

(a) If the greatest input on a volume basis into the storage vessel is from a process unit that is located on the same plant site, then that process unit has the predominant use.

(b) If the greatest input on a volume basis into the storage vessel is provided from a process unit that is not located on the same plant site, then the predominant use shall be the process unit that receives the greatest amount of material on a volume basis from the storage vessel at the same plant site.

(2) If a storage vessel is shared among process units so that there is no single predominant use, and at least one of those process units is a petroleum refining process unit subject to this subpart, the storage vessel shall be considered to be part of the petroleum refining process unit that is subject to this subpart. If more than one petroleum refining process unit is subject to this subpart, the permittee may assign the storage vessel to any of the petroleum refining process units subject to this subpart.

(3) If the predominant use of a storage vessel varies from year to year, then the applicability of this subpart shall be determined based on the utilization of that storage vessel during the year preceding promulgation of this subpart. This determination shall be reported as specified in 40 CFR 63.654(h)(6)(ii) of this subpart.

18.b [40 CFR 63.640(f)]
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 this subpart applies.

i. 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.

ii. 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.

iii. 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 this subpart, the distillation unit shall be assigned to the petroleum refining process unit that is subject to this subpart. If more than one petroleum refining process unit is subject to this subpart, the permittee may assign the distillation unit to any of the petroleum refining process units subject to this rule.

iv. If the process unit to which the distillation unit is assigned is a petroleum refining process unit subject to this subpart 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 of this subpart) and is part of the source to which this subpart applies.

v. If the predominant use of a distillation unit varies from year to year, then the applicability of this subpart shall be determined based on the utilization of that distillation unit during the year preceding promulgation of this subpart. This determination shall be reported as specified in 40 CFR 63.654(h)(6)(iii).

18.c [40 CFR 63.640(h)]
Except as provided in paragraphs (k), (l), or (m) of 40 CFR 63.640, sources subject to this subpart are required to achieve compliance on or before the dates specified in paragraphs (h)(1) through (h)(4) of 40 CFR 63.640.

i. New sources that commence construction or reconstruction after July 14, 1994 shall be in compliance with this subpart upon initial startup or the date of promulgation of this subpart, whichever is later, as provided in 40 CFR 63.6(b) of subpart A of this part.

ii. Except as provided in paragraphs (h)(3) through (h)(5) of 40 CFR 63.640, existing sources shall be in compliance with this subpart no later than August 18, 1998, except as provided in 40 CFR 63.6(c) of subpart A of this part, or unless an extension has been granted by the Administrator as provided in 40 CFR 63.6(i) of subpart A of this part.

iii. 40 CFR 63.640(h)(3) is not applicable, since the facility does not have any marine vessels.

iv. 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.

v. A permittee 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 permittee shall comply no later than the dates specified in paragraphs (h)(5)(i) through (h)(5)(iii) of 40 CFR 63.640.

(1) Phase I (see table 2 of this subpart), beginning on August 18, 1998;

(2) Phase II (see table 2 of this subpart), beginning no later than August 18, 1999; and

(3) Phase III (see table 2 of this subpart), beginning no later than February 18, 2001.

18.d [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 (i)(1) through (i)(3) of 40 CFR 63.640:

(1) It is an addition that meets the definition of construction in 40 CFR 63.2 of subpart A of this part;

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

(3) The addition has the potential to emit 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants.

18.e [40 CFR 63.640(j)]
If any change is made to a petroleum refining process unit subject to this subpart, the change shall be subject to the requirements for a new source if it meets the criteria specified in paragraphs (j)(1) and (j)(2) of 40 CFR 63.640:

(1) It is a change that meets the definition of reconstruction in 40 CFR 63.2 of subpart A of this part; and

(2) Such reconstruction commenced after July 14, 1994.

18.f [40 CFR 63.640(k)]
If an additional petroleum refining process unit is added to a plant site or a change is made to a petroleum refining process unit and the addition or change is determined to be subject to the new source requirements according to paragraphs (i) or (j) of 40 CFR 63.640 it must comply with the requirements specified in paragraphs (k)(1) and (k)(2) of 40 CFR 63.640:

i. The reconstructed source, addition, or change shall be in compliance with the new source requirements upon initial startup of the reconstructed source or by the date of promulgation of this subpart, whichever is later; and

ii. The permittee of the reconstructed source, addition, or change shall comply with the reporting and recordkeeping requirements that are applicable to new sources. The applicable reports include, but are not limited to:

(1) The application for approval of construction or reconstruction shall be submitted as soon as practical before the construction or reconstruction is planned to commence (but it need not be sooner than 90 days after the date of promulgation of this subpart);

(2) The Notification of Compliance Status report as required by 40 CFR 63.654(f) for a new source, addition, or change;

(3) Periodic Reports and Other Reports as required by 40 CFR 63.654 (g) and (h);

(4) Reports and notifications required by 40 CFR 60.487 of subpart VV of part 60 or 40 CFR 63.182 of subpart H of this part. The requirements for subpart H are summarized in table 3 of this subpart;

(5) Reports required by 40 CFR 61.357 of subpart FF;

(6) 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 this subpart; and

(7) Reports and notifications required by 40 CFR 63.565 and 63.567 of subpart Y of this part. These requirements are summarized in table 5 of this subpart.

18.g [40 CFR 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 paragraphs (c)(1) through (c)(7) of 40 CFR 63.640 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 40 CFR 63.641) 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 paragraphs (i) or (j) of 40 CFR 63.640, 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 paragraph (m) of 40 CFR 63.640, 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).

i. 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.

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

(1) 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 this subpart, whichever is later.

(2) 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 this subpart, 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 paragraphs (m)(1) through (m)(3) of 40 CFR 63.640 to establish a compliance date.

iii. 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 paragraphs (c)(1) through (c)(7) of 40 CFR 63.640 that is added to a plant site and is subject to the requirements for existing sources shall comply with the reporting and recordkeeping 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 in paragraphs (l)(3)(i) through (l)(3)(vii) of 40 CFR 63.640. The applicable reports include, but are not limited to:

(1) The Notification of Compliance Status report as required by 40 CFR 63.654(f) for the emission points that were added or changed;

(2) Periodic Reports and other reports as required by 40 CFR 63.654 (g) and (h);

(3) Reports and notifications required by sections of subpart A of this part that are applicable to this subpart, as identified in table 6 of this subpart.

(4) Reports and notifications required by 40 CFR 63.182, or 40 CFR 60.487. The requirements of subpart H of this part are summarized in table 3 of this subpart;

(5) Reports required by 40 CFR 61.357 of subpart FF;

(6) Reports and notifications required by 40 CFR 63.428 (b), (c), (g)(1), and (h)(1) through (h)(3) of subpart R of this part. These requirements are summarized in table 4 of this subpart; and

(7) Reports and notifications required by 40 CFR 63.567 of subpart Y of this part. These requirements are summarized in table 5 of this subpart.

iv. 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. A notification of compliance status report shall not be required for such added equipment.

18.h [40 CFR 63.640(m)]
If a change that does not meet the criteria in paragraph (l) of 40 CFR 63.640 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 of this subpart 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. The permittee shall submit to the Administrator for approval a compliance schedule, along with a justification for the schedule.

ii. 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. 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.

18.i [40 CFR 63.640(n)] Overlap of subpart CC with other regulations for storage vessels

i. After the compliance dates specified in paragraph (h) of 40 CFR 63.640, 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 (n)(8) of 40 CFR 63.640.

ii. After the compliance dates specified in paragraph (h) of 40 CFR 63.640 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 this subpart.

iii. After the compliance dates specified in paragraph (h) of 40 CFR 63.640, a Group 2 storage vessel that is part of a new source and is subject to the control requirements in 40 CFR 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 paragraph (n)(8) of 40 CFR 63.640.

iv. After the compliance dates specified in paragraph (h) of 40 CFR 63.640, 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 this subpart.

v. 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 60, subparts K or Ka is required to only comply with the provisions of 40 CFR 63, subpart CC.

vi. 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 60, subparts K or Ka is required to comply only with the provisions of 40 CFR 60, subparts K or Ka except as provided for in 40 CFR 63.640(n)(9).

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

viii. Storage vessels described by 40 CFR 63.640(n)(1) and (n)(3) are to comply with 40 CFR part 60, subpart Kb except as provided for in 40 CFR 63.640(n)(8)(i) through (n)(8)(iv).

(1) 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.

(2) 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.

(3) 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.

(4) 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 40 CFR 60.113b(b)(4)(iii), and describe the nature and date of the repair made or provide the date the storage vessel was emptied.

(5) 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 this subpart, rather than within the 30-day period specified in 60.115b(a)(3), (a)(4), and (b)(4) of subpart Kb.

(6) 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).

ix. Storage vessels described by paragraph (n)(6) of 40 CFR 63.640 that are to comply with 40 CFR part 60, subpart Ka, are to comply with only subpart Ka except as provided for in paragraphs (n)(9)(i) through (n)(9)(iv) of 40 CFR 63.640.

(1) If the permittee determines that it is unsafe to perform the seal gap measurements required in 40 CFR 60.113a(a)(1) of subpart Ka because the floating 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 40 CFR 63.120(b)(7)(ii) of subpart G.

(2) If a failure is detected during the seal gap measurements required by 40 CFR 60.113a(a)(1) of subpart Ka, and the vessel cannot be repaired within 45 days and the vessel cannot be emptied within 45 days, the permittee may utilize up to 2 extensions of up to 30 additional calendar days each.

(3) If an extension is utilized in accordance with paragraph (n)(9)(ii) of 40 CFR 63.640, the permittee shall, in the next periodic report, identify the vessel, describe the nature and date of the repair made or provide the date the storage vessel was emptied. The permittee shall also provide documentation of the decision to utilize an extension including a description of the failure, documentation that alternate storage capacity is unavailable, and a schedule of actions that will ensure that the control equipment will be repaired or the vessel emptied as soon as possible.

(4) Permittees of storage vessels complying with subpart Ka of part 60 may submit the inspection reports required by 40 CFR 60.113a(a)(1)(i)(E) of subpart Ka as

part of the periodic reports required by this subpart, rather than within the 60-day period specified in 40 CFR 60.113a(a)(1)(i)(E) of subpart Ka.

18.j [40 CFR 63.640(o)] Overlap of subpart CC with other regulations for wastewater

[40 CFR 63.640(o)] continued

i. After the compliance dates specified in paragraph (h) of 40 CFR 63.640 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 this subpart.

ii. After the compliance dates specified in paragraph (h) of 40 CFR 63.640 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 of this part shall comply as specified in paragraph (o)(2)(i) or (o)(2)(ii) of 40 CFR 63.640. Compliance with the provisions of paragraph (o)(2) of 40 CFR 63.640 shall constitute compliance with the requirements of this subpart for that wastewater stream.

(1) Comply with paragraphs (o)(2)(i)(A) through (o)(2)(i)(C) of 40 CFR 63.640.

(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.

(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.

(c) The provisions in 40 CFR 63.143 through 63.148 of subpart G for monitoring and inspections of equipment and for recordkeeping and reporting requirements. The permittee is not required to comply with the monitoring, recordkeeping, and reporting requirements associated with the treatment and control requirements in 40 CFR part 61, subpart FF, 40 CFR 61.355 through 61.357.

(2) Comply with paragraphs (o)(2)(ii)(A) and (o)(2)(ii)(B) of 40 CFR 63.640.

(a) Comply with the provisions of 40 CFR 63.133 through 63.148 and 40 CFR 63.151 and 63.152 of subpart G.

(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 40 CFR 63.147 of subpart G for Group 1 wastewater streams.

18.k [40 CFR 63.640(p)] Overlap of subpart CC with other regulations for equipment leaks

After the compliance dates specified in paragraph (h) of 40 CFR 63.640 equipment leaks that are also subject to the provisions of 40 CFR parts 60 and 61 are required to comply only with the provisions specified in this subpart.

18.l [40 CFR 63.640(q)] Overlap of subpart CC with local or State regulations

The permitting authority for the affected source may allow consolidation of the monitoring, recordkeeping, and reporting requirements under this subpart with the monitoring, recordkeeping, and reporting requirements under other applicable requirements in 40 CFR parts 60, 61, or 63, and in any 40 CFR part 52 approved State implementation plan provided the implementation plan allows for approval of alternative monitoring, reporting, or recordkeeping requirements and provided that the permit contains an equivalent degree of compliance and control.

19. [40 CFR 63, Subpart CC, Table 10] Miscellaneous Process Vents - Monitoring and Record Keeping for Complying with 98 Weight-Percent Reduction of Total Organic HAP Emissions or a Limit of 20 Parts Per Million by Volume

a. Flare - presence of a flame at the pilot light:

i Record hourly whether the monitor was continuously operating and whether a pilot flame was continuously present during each hour.

ii. Record the presence of a flame at the pilot light over the full period of the compliance determination - Notification of Compliance Status (NCS).

iii. Record the times and durations of all periods when all pilot flames for a flare are absent or not operating.

b. All Control Devices - Monitor the presence of flow diverted to the atmosphere from the control device [40 CFR 63.644(c)(1)] or monthly inspections of sealed valves [40 CFR 63.644(c)(2)]. For presence of flow diverted to atmosphere, record the following:

i Record hourly whether the flow through the control device indicator was operating and whether flow was detected at any time during each hour.

ii. 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 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 NCS or operating permit, a statement to this effect can be recorded instead of the daily average.

20. [40 CFR 63, Subpart CC, Table 10] Miscellaneous Process Vents Reporting Requirements for Complying with 98 Weight-Percent Reduction of Total Organic HAP Emissions or a Limit of 20 Parts Per Million by Volume

a. Flare - presence of a flame at the pilot light.

i Report the presence of a flame at the pilot light over the full period of the compliance determination - Notice of Compliance Status (NCS).

ii. Report the times and durations of all periods when all pilot flames for a flare are absent or the monitor is not operating.

b. All Control Devices -Monitor the presence of flow diverted to the atmosphere from the control device [40 CFR 63.644(c)(1)] or monthly inspections of sealed valves [40 CFR 63.644 (c)(2)]. 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.

21. [40 CFR 60.482-1] Standards: General - 40 CFR 60, subpart VV

a. [40 CFR 60.482-1(a)]
Each permittee subject to the provisions of this subpart shall demonstrate compliance with the requirements of 40 CFR 60.482-1 to 60.482-10 for all equipment within 180 days of initial startup.

b. [40 CFR 60.482-1(b)]
Compliance with 40 CFR 60.482-1 to 40 CFR 60.482-10 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 60.485.

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

If the Administrator makes a determination that a means of emission limitation is at least equivalent to the requirements of 40 CFR 60.482-2, 60.482-3, 60.482-5, 60.482-6, 60.482-7, 60.482-8 and 60.482-10, the permittee shall comply with the requirements of that determination.

d. [40 CFR 60.482-1(d)]
Equipment that is in vacuum service is excluded from the requirements of 40 CFR 60.482-2 to 60.482-10 if it is identified as required in 40 CFR 60.486(e)(5).

22. [40 CFR 60.482-2] Standards: Pumps in Light Liquid Service - 40 CFR 60, subpart VV

a. [40 CFR 60.482-2(a)]
Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485(b), except as provided in 40 CFR 60.482-1(c) and paragraphs (d), (e) and (f) of 40 CFR 60.482-2. Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

b. [40 CFR 60.482-2(b)]
If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. If there are indications of liquids dripping from the pump seal, a leak is detected.

c. [40 CFR 60.482-2(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 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

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

i Each dual mechanical seal system is:

(1) operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or

(2) 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 40 CFR 60.482-10; or

(3) equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.

ii. The barrier fluid system is in heavy liquid service or is not in VOC service.

iii. Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.

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

v. Each sensor as described in 40 CFR 60.482-2(d)(iii) is checked daily or is equipped with an audible alarm, and 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.

vi. 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)(v), a leak is detected. 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. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

e. [40 CFR 60.482-2(e)]
Any pump that is designated, as described in 40 CFR 60.486(e)(1) and (2), 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), (c) and (d) of 40 CFR 60.482-2 if the pump:

i. has no externally actuated shaft penetrating the pump housing;

ii. 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 40 CFR 60.485(c); and

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

22. [40 CFR 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 control device that complies with the requirements of 40 CFR 60.482-10, it is exempt from paragraphs (a) through (e) of 40 CFR 60.482-2.

23. [40 CFR 60.482-3] Standards: Compressors - 40 CFR 60, subpart VV

23.a [40 CFR 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 40 CFR 60.482-1(c) and paragraphs (h) and (i) of 40 CFR 60.482-3.

23.b [40 CFR 60.482-3(b)(1)-(3)]
Each compressor seal system as required in paragraph (a) of 40 CFR 60.482-3 shall be:

i operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or

ii. equipped with a barrier fluid system that is connected by a closed vent system to a control device that complies with the requirements of 40 CFR 60.482-10; or

iii. equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.

23.c [40 CFR 60.482-3(c)]
The barrier fluid system shall be in heavy liquid service or shall not be in VOC service.

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

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

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

23.g [40 CFR 60.482-3(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 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

23.h [40 CFR 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 40 CFR 60.482-10, except as provided in paragraph (i) of 40 CFR 60.482-3.

23.i [40 CFR 60.482-3(i)]
Any compressor that is designated, as described in 40 CFR 60.486(e)(1) and (2), 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:

i 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 40 CFR 60.485(c); and

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

23.j [40 CFR 60.482-3(j)]
Any existing reciprocating compressor in a process unit which becomes an affected facility under provisions of 40 CFR 60.14 or 60.15 is exempt from 40 CFR 60.482-3(a), (b), (c), (d), (e), and (h), 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.

24. [40 CFR 60.482-4] Standards: Pressure Relief Devices in Gas/Vapor Service - 40 CFR 60, subpart VV

24.a [40 CFR 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 40 CFR 60.485(c).

24.b [40 CFR 60.482-4(b)]
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 40 CFR 60.482-9. 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 40 CFR 60.485(c).

24.c [40 CFR 60.482-4(c)]
Any pressure relief device that is equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in 40 CFR 60.482-10 is exempted from the requirements of paragraphs (a) and (b) of 40 CFR 60.482-4.

25. [40 CFR 60.482-5] Standards: Sampling Connection Systems - 40 CFR 60, subpart VV

25.a [40 CFR 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 40 CFR 60.482-1(c).

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

i return the purged process fluid directly to the process line; or

ii. collect and recycle the purged process fluid to a process; or

iii. be designed and operated to capture and transport all the purged process fluid to a control device that complies with the requirements of 40 CFR 60.482-10.

25.c [40 CFR 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.

26. [40 CFR 60.482-6] Standards: Open-ended Valves or Lines - 40 CFR 60, subpart VV

26.a [40 CFR 60.482-6(a)(1) and (2)]
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 60.482-1(c). 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.

26.b [40 CFR 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.

26.c [40 CFR 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 paragraph (a) of 40 CFR 60.482-6 at all other times.

27. [40 CFR 60.482-7] Standards: Valves in Gas/Vapor Service and in Light Liquid Service - 40 CFR 60, subpart VV

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

27.b [40 CFR 60.482-7(b)]
If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

27.c [40 CFR 60.482-7(c)(1) and (2)]
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. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.

27.d [40 CFR 60.482-7(d)(1) and (2)]
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 60.482-9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

27.e [40 CFR 60.482-7(e)(1)-(4)]
First attempts at repair include, but are not limited to, the following best practices where practicable:

i tightening of bonnet bolts;

ii. replacement of bonnet bolts;

iii. tightening of packing gland nuts; and

iv. injection of lubricant into lubricated packing.

27.f [40 CFR 60.482-7(f)(1)-(3)]
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 paragraph (a) of 40 CFR 60.482-7 if the valve:

i has no external actuating mechanism in contact with the process fluid;

ii. is operated with emissions less than 500 ppm above background as determined by the method specified in 40 CFR 60.485(c); and

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

27.g [40 CFR 60.482-7(g)(1)(2)]
Any valve that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of paragraph (a) of 40 CFR 60.482-7 if:

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 complying with paragraph (a) of 40 CFR 60.482-7; and

ii. 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.

27.h [40 CFR 60.482-7(h)(1)-(3)]
Any valve that is designated, as described in 40 CFR 60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of paragraph (a) of 40 CFR 60.482-7 if:

i 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;

ii. 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

iii. the permittee of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

28. [40 CFR 60.482-8] Standards: Pumps and Valves in Heavy Liquid Service, Pressure Relief Devices in Light Liquid or Heavy LIquid Service, and Flanges and Other Connectors - 40 CFR 60, subpart VV

28.a [40 CFR 60.482-8(a)]
Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors shall be monitored within 5 days by the method specified in 40 CFR 60.485(b) if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method.

28.b [40 CFR 60.482-8(b)]
If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

28.c [40 CFR 60.482-8(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 60.482-9. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

28.d [40 CFR 60.482-8(d)]
First attempts at repair include, but are not limited to, the best practices described under 40 CFR 60.482-7(e).

29. [40 CFR 60.482-9] Standards: Delay of Repair - 40 CFR 60, subpart VV

29.a [40 CFR 60.482-9(a)]
Delay of repair of equipment for which leaks have been detected will be allowed if the repair is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.

29.b [40 CFR 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.

29.c [40 CFR 60.482-9(c)(1)-(2)]
Delay of repair for valves will be allowed if:

i 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

ii. when repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR 60.482-10.

29.d [40 CFR 60.482-9(d)(1)-(2)]
Delay of repair for pumps will be allowed if:

i repair requires the use of a dual mechanical seal system that includes a barrier fluid system; and

ii. repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

29.e [40 CFR 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.

30. [40 CFR 60.482-10] Standards: Closed Vent Systems and Control Devices - 40 CFR 60, subpart VV

30.a [40 CFR 60.482-10(a)]
Permittees of closed vent systems and control devices used to comply with provisions of this subpart shall comply with the provisions of this section.

30.b [40 CFR 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.

30.c [40 CFR 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 degrees Celsius.

30.d [40 CFR 60.482-10(d)]
Flares used to comply with this subpart shall comply with the requirements of 40 CFR 60.18.

30.e [40 CFR 60.482-10(e)]
Permittees of control devices used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs.

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

i [40 CFR 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: conduct an initial inspection according to the procedures in 40 CFR 60.485(b); and conduct annual visual inspections for visible, audible, or olfactory indications of leaks.

ii. [40 CFR 60.482-10(f)(2)]
If the vapor collection system or closed vent system is constructed of ductwork, the permittee shall conduct an initial inspection according to the procedures in 40 CFR 60.485(b) and conduct annual inspections according to the procedures in 40 CFR 60.485(b).

30.g [40 CFR 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 first attempt at repair shall be made no later than 5 calendar days after the leak is detected. Repair shall be completed no later than 15 calendar days after the leak is detected.

30.h [40 CFR 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.

30.i [40 CFR 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.

30.j [40 CFR 60.482-10(j)(1)-(2)]
Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10(l)(1), 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):

i 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

ii. the permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.

30.k [40 CFR 60.482-10(k)(1)-(3)]
Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10(l)(2), 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 paragraphs (k)(1) through (k)(3) of 40 CFR 60.482-10:

i the permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and

ii. 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

iii. 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.

30.l [40 CFR 60.482-10(l)]
The permittee shall record the following information:

i [40 CFR 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. [40 CFR 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. [40 CFR 60.482-10(l)(3)]
For each inspection during which a leak is detected, a record of the information specified in 40 CFR 60.486(c).

iv. [40 CFR 60.482-10(l)(4)]
For each inspection conducted in accordance with 40 CFR 60.485(b) 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. [40 CFR 60.482-10(l)(5)]
For each visual inspection conducted in accordance with section 40 CFR 60.482-10(f)(i) 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.

[40 CFR 60.482-10(l)]
The permittee shall record the information specified in paragraphs (l)(1) through (l)(5) of 40 CFR 60.482-10:

i. 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. 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. For each inspection during which a leak is detected, a record of the information specified in 40 CFR 60.486(c).

iv. For each inspection conducted in accordance with 40 CFR 60.485(b) 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. For each visual inspection conducted in accordance with paragraph (f)(1)(ii) of 40 CFR 60.482-10 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.

30.m [40 CFR 60.482-10(m)]
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.

31. [40 CFR 60.483-1] Alternative Standards for Valves - Allowable Percentage of Valves Leaking - 40 CFR 60, subpart VV

31.a [40 CFR 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.

31.b [40 CFR 60.483-1(b)]
The following requirements shall be met if the permittee wishes to comply with an allowable percentage of valves leaking:

i The permittee must notify the Director and Administrator that the permittee has elected to comply with the allowable percentage of valves leaking before implementing this alternative standard, as specified in 40 CFR 60.487(b).

ii. 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 Director and Administrator.

iii. If a valve leak is detected, it shall be repaired in accordance with 40 CFR 60.482-7(d) and (e).

31.c [40 CFR 60.483-1(c)]
Performance tests shall be conducted in the following manner:

i All valves in gas/vapor and light liquid service within the affected facility shall be monitored within 1 week by the methods specified in 40 CFR 60.485(b).

ii. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

iii. 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.

31.d [40 CFR 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.

32. [40 CFR 60.483-2] Alternative Standards for Valves - Skip Period Leak Detection and Repair - 40 CFR 60, subpart VV

32.a [40 CFR 60.483-2(a)]
The permittee may elect to comply with one of the alternative work practices specified in paragraphs b.ii. and b.iii. of 40 CFR 60.483-2. The permittee must notify the Director and Administrator before implementing one of the alternative work practices, as specified in 40 CFR 60.487(b).

32.b [40 CFR 60.483-2(b)(1)-(6)]

i The permittee shall comply initially with the requirements for valves in gas/vapor service and valves in light liquid service, as described in 40 CFR 60.482-7.

ii. 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.

iii. 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.

iv. If the percent of valves leaking is greater than 2.0, the permittee shall comply with the requirements as described in 40 CFR 60.482-7, but can again elect to use this section.

v. 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 this section.

vi. The permittee must keep a record of the percent of valves found leaking during each leak detection period.

33. [40 CFR 60.484] Equivalence of Means of Emission Limitation - 40 CFR 60, subpart VV

33.a [40 CFR 60.484(a)]
Each permittee subject to the provisions of this subpart may apply to the Director and 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 this subpart.

33.b [40 CFR 60.484(b)(1)-(3)]
Determination of equivalence to the equipment, design, and operational requirements of this subpart will be evaluated by the following guidelines:

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

ii. The Director and Administrator will compare test data for the means of emission limitation to test data for the equipment, design, and operational requirements.

iii. The Director and 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.

33.c [40 CFR 60.484(c)(1)-(6)]
Determination of equivalence to the required work practices in this subpart will be evaluated by the following guidelines:

i 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.

ii. For each affected facility for which a determination of equivalence is requested, the emission reduction achieved by the required work practice shall be demonstrated.

iii. 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.

iv. 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.

v. The Director and 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).

vi. The Director and 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.

33.d [40 CFR 60.484(d)]
The permittee may offer a unique approach to demonstrate the equivalence of any equivalent means of emission limitation.

33.e [40 CFR 60.484(e)(1)-(3)]
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. 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. 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.

33.f [40 CFR 60.484(f)(1)-(2)]
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 this subpart. The Administrator will make an equivalence determination according to the provisions of paragraphs (b), (c), (d), and (e) of 40 CFR 60.484.

34. [40 CFR 60.485] Test Methods and Procedures, Leak Detection - 40 CFR 60, subpart VV

34.a [40 CFR 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 this part or other methods and procedures as specified in this section, except as provided in 40 CFR 60.8(b).

34.b [40 CFR 60.485(b)]
The permittee shall determine compliance with the standards in 40 CFR 60.482, 60.483, and 60.484 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 [40 CFR 60.485(b)(1)(i)]
zero air (less than 10 ppm of hydrocarbon in air); and

ii. [40 CFR 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.

34.c [40 CFR 60.485(c)]
The permittee shall determine compliance with the no detectable emission standards in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, 60.482-7(f) and 60.482-10(e) as follows:

i The requirements of paragraph (b) of 40 CFR 60.485 shall apply.

ii. 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 indicates by the instrument and the background level is compared with 500 ppm for determining compliance.

34.d [40 CFR 60.485(d)]
The permittee shall test each piece of equipment unless he demonstrates that a process unit is not in VOC series, 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 [40 CFR 60.485(d)(1)]
Procedures that conform to the general methods in ASTM E-260, E-168, E-169 shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment.

ii. [40 CFR 60.485(d)(2)]
Organic compounds that are considered by the Director and 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. [40 CFR 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 Director and Administrator disagree with the judgment, 40 CFR 60.485(d)(1) and (2) shall be used to resolve the disagreement.

34.e [40 CFR 60.485(e)]
The permittee shall demonstrate that an equipment is in light liquid service by showing that all the following conditions apply:

i [40 CFR 60.485(e)(1)]
The vapor pressure of one or more of the components is greater than 0.3 kPa at 20 degrees Celsius. Standard reference texts or ASTM D-2879 shall be used to determine the vapor pressures.

ii. [40 CFR 60.485(e)(2)]
The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20 degrees Celsius is equal to or greater than 20 percent by weight.

iii. [40 CFR 60.485(e)(3)]
The fluid is a liquid at operating conditions.

34.f [40 CFR 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.

34.g [40 CFR 60.485(g)]
The permittee shall determine compliance with the standards of flares as follows:

i [40 CFR 60.685(g)(1)]
Method 22 shall be used to determine visible emissions.

ii. [40 CFR 60.685(g)(2)]
A thermocouple or any other equivalent device shall be used to monitor the presence of a pilot flame in the flare.

iii. [40 CFR 60.685(g)(3)]
The maximum permitted velocity (Vmax) for air-assisted flares shall be computed using the following equation:

Vmax = 8.706+0.7084 HT

where:
Vmax = maximum permitted velocity, m/sec.
HT = net heating value of the gas being combusted, MJ/scm.

iv. [40 CFR 60.685(g)(4)]
The net heating value (HT) of the gas being combusted in a flare shall be computed using the equation found in 40 CFR 60.685(g)(4).

v. [40 CFR 60.685(g)(5)]
Method 18 and ASTM D 2504-67 shall be used to determine the concentration of sample component "i.".

vi. [40 CFR 60.685(g)(6)]
ASTM D 2382-76 shall be used to determine the net heat of combustion of component "i" if published values are not available or cannot be calculated.

vii. [40 CFR 60.685(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.

35. [40 CFR 60.486] Record Keeping Requirements, Equipment Leaks - 40 CFR 60, subpart VV

35.a [40 CFR 60.486(a)]
Each permittee subject to the provisions of 40 CFR 60, subpart VV shall comply with the record keeping requirements of this section. A permittee of more than one affected facility subject to the provisions of this subpart may comply with the record keeping requirements for these facilities in one record keeping system if the system identifies each record by each facility.

35.b [40 CFR 60.486(b)]
When each leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8 and 60.483-2, the following requirements apply:

i [40 CFR 60.486(b)(1)]
A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

ii. [40 CFR 60.486(b)(2)]
The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 60.482-7(c) and no leak has been detected during those 2 months.

iii. [40 CFR 60.486(b)(3)]
The identification on equipment except on a valve, may be removed after it has been repaired.

35.c [40 CFR 60.486(c)]
When each leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8 and 60.483-2, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:

i [40 CFR 60.486(c)(1)]
The instrument and operator identification numbers and the equipment identification number.

ii. [40 CFR 60.486(c)(2)]
The date the leak was detected and the dates of each attempt to repair the leak.

iii. [40 CFR 60.486(c)(3)]
Repair methods applied in each attempt to repair the leak.

iv. [40 CFR 60.486(c)(4)]
"Above 10,000" if the maximum instrument reading measured by the methods specified in 40 CFR 60.485(a) after each repair attempt is equal to or greater than 10,000 ppm.

v. [40 CFR 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.

vi. [40 CFR 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.

vii. [40 CFR 60.486(c)(7)]
The expected date of successful repair of the leak if a leak is not repaired within 15 days.

viii. [40 CFR 60.486(c)(8)]
Dates of process unit shutdown that occur while the equipment is unrepaired.

ix. [40 CFR 60.486(c)(9)]
The date of successful repair of the leak.

35.d [40 CFR 60.486(d)]
The following information pertaining to the design requirements for closed vent systems and control devices described in 40 CFR 60.482-10 shall be recorded and kept in a readily accessible location:

i [40 CFR 60.486(d)(1)]
Detailed schematics, design specifications, and piping and instrumentation diagrams.

ii. [40 CFR 60.486(d)(2)]
The dates and descriptions of any changes in the design specifications.

iii. [40 CFR 60.486(d)(3)]
A description of the parameter or parameters monitored, as required in 40 CFR 60.482-10(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.

iv. [40 CFR 60.486(d)(4)]
Periods when the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5 are not operated as designed, including periods when a flare pilot light does not have a flame.

v. [40 CFR 60.486(d)(5)]
Dates of startups and shutdowns of the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5.

35.e [40 CFR 60.486(e)]
The following information pertaining to all equipment subject to the requirements in 40 CFR 60.482-1 to 60.482-10 shall be recorded in a log that is kept in a readily accessible location:

i [40 CFR 60.486(e)(1)]
A list of identification numbers for equipment subject to the requirements of 40 CFR 60, subpart VV.

ii. [40 CFR 60.486(e)(2)]
A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f). The designation of equipment subject to the requirements of 40 CFR 60.482-2(e), 60.482-3(i), or 60.482-7(f) shall be signed by the permittee.

iii. [40 CFR 60.486(e)(3)]
A list of equipment identification numbers for pressure relief devices required to comply with 40 CFR 60.482-4.

iv. [40 CFR 60.486(e)(4)]

(a) The dates of each compliance test as required in 40 CFR 60.482-2(e), 60.482-3(i), 60.482-4, and 60.482-7(f).

(b) The background level measured during each compliance test.

(c) The maximum instrument reading measured at the equipment during each compliance test.

v. [40 CFR 60.486(e)(5)]
A list of identification numbers for equipment in vacuum service.

35.f [40 CFR 60.486(f)]
The following information pertaining to all valves subject to the requirements of 40 CFR 60.482-7(g) and (h) shall be recorded in a log that is kept in a readily accessible location:

i [40 CFR 60.486(f)(1)]
A list of identification numbers for valves that are designated as unsafe-to-monitor, an explanation for each valve stating why the valve is unsafe-to-monitor, and the plan for monitoring each valve.

ii. [40 CFR 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.

35.g [40 CFR 60.486(g)]
The following information shall be recorded for valves complying with 40 CFR 60.483-2:

i A schedule of monitoring.

ii. The percent of valves found leaking during each monitoring period.

35.h [40 CFR 60.486(h)(1)-(2)]
The following information shall be recorded in a log that is kept in a readily accessible location. The design criterion required in 40 CFR 60.482-2(d)(5) and 60.482-3(e)(2), and an explanation of the design criterion; along with any changes to this criterion and the reasons for the changes.

35.i [40 CFR 60.486(i)(1)-(3)]
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):

i an analysis demonstrating the design capacity of the affected facility;

ii. 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

iii. an analysis demonstrating that equipment is not in VOC service.

35.j [40 CFR 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.

35.k [40 CFR 60.486(k)]
The provisions of 40 CFR 60.7(b) and (d) do not apply to affected facilities subject to 40 CFR 60, subpart VV.

36. [40 CFR 60.487] Reporting Requirements, Equipment Leaks - 40 CFR 60, Subpart VV

36.a [40 CFR 60.487(a)]
Each permittee subject to the provisions of this subpart shall submit semiannual reports to the Director and Administrator beginning six months after the initial start-up date.

36.b [40 CFR 60.487(c)(1) - (4)]
All semiannual reports to the Director and Administrator shall include the following information, summarized from the information in 40 CFR 60.486:

i [40 CFR 60.487(c)(1)]
Process unit identification.

ii. [40 CFR 60.487(c)(2)]
For each month during the semiannual reporting period:

(1) number of valves for which leaks were detected as described in 40 CFR 60.482(7)(b);
(2) number of valves for which leaks were not repaired as required in paragraph 40 CFR 60.482-7(d)(1);
(3) number of pumps for which leaks were detected as described in 40 CFR 60.482-2(b) and (d)(6)(i);
(4) number of pumps for which leaks were not repaired as required in 40 CFR 60.482-2(c)(1) and (d)(6)(ii);
(5) number of compressors for which leaks were detected as described in 40 CFR 60.482-3(f);
(6) number of compressors for which leaks were not repaired as required in 40 CFR 60.482-3(g)(1); and
(7) the facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible.

iii. [40 CFR 60.487(c)(3)]
Dates of process unit shutdowns which occurred within the semiannual reporting period.

iv. [40 CFR 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.

36.c [40 CFR 60.487(d)]
The permittee electing to comply with the provisions of 40 CFR 60.483-1 and 60.483-2 shall notify the Director and Administrator of the alternative standard selected 90 days before implementing either of the provisions.

36.d [40 CFR 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 60 subpart VV except that the permittee must notify the Director and Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests.

37. General Provisions of 40 CFR 63, subpart A:

37.a [40 CFR 63.6(e)]
Operation and maintenance requirements.

i [40 CFR 63.6(e)(1) (ii) and (iii)]

(1) Malfunctions shall 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).

(2) 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.

37.b [40 CFR 63.6(e)(2)]
Determination of whether acceptable 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 section A.37.c, review of operation and maintenance records, and inspection of the source.

37.c [40 CFR 63.6(e)(3)(i), (3)(ii), and (3)(vi) through (3)(viii)] Startup, Shutdown, and Malfunction Plan.

i The permittee of an affected source shall 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 and a program of corrective action for malfunctioning process and air pollution control

equipment used to comply with the relevant standard. As required under 40 CFR 63.8(c)(1)(i), the plan shall identify all routine or otherwise predictable CMS malfunctions. This plan shall be developed by the permittee by the source's compliance date for that relevant standard. The plan shall be incorporated by reference into the source's title V permit. The purpose of the startup, shutdown, and malfunction plan is to:

(1) Ensure that permittees are prepared to correct malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of hazardous air pollutants; and

(2) 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).

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)(i).

iii. To satisfy the requirements of this section 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 this section and are made available for inspection when requested by the Administrator.

iv. Based on the results of a determination made under 40 CFR 63.6(e)(i)(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:

(1) Does not address a startup, shutdown, or malfunction event that has occurred;

(2) Fails to provide for the operation of the source (including associated air pollution control equipment) during a startup, shutdown, or malfunction event in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards; or

(3) Does not provide adequate procedures for correcting malfunctioning process and/or air pollution control equipment as quickly as practicable.

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 shall 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 equipment.

37.d [40 CFR 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.

37.e [40 CFR 63.13]
Addresses of State air pollution control agencies and EPA Regional Offices.

i [40 CFR 63.13(a)]
All requests, reports, applications, submittals, and other communications to the Administrator pursuant to this part shall be submitted to the appropriate Regional Office of the U.S. Environmental Protection Agency indicated: EPA Region V, Director, Air and Radiation Division, 77 West Jackson Blvd., Chicago, IL 60604-3507.

ii. [40 CFR 63.13(b)]
All information required to be submitted to the Administrator under this part also shall be submitted to the Ohio EPA, Northwest District Office, 347 North Dunbridge Rd., Bowling Green, Ohio 43402, to which authority has been delegated under section 112(l) of the Clean Air Act as amended in 1990.

iii. [40 CFR 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 this part for that communication.

37.f [40 CFR 63.14(a)] Incorporations by reference.
The materials listed in 40 CFR 63.14 are incorporated by reference in the corresponding sections noted.

37.g [40 CFR 63.15] Availability of information and confidentiality.

i [40 CFR 63.15(a)(1) and (a)(2)] Availability of information.

(1) 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.

(2) 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. [40 CFR 63.15(b)(1) and (b)(2)] Confidentiality.

(1) 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.

(2) 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.

38. [40 CFR 61.342] Standards General - Benzene Wastewater - 40 CFR 61, subpart FF

38.a [40 CFR 61.342(a)]
A permittee of a facility at which the total annual benzene quantity from facility waste is less than 10 megagrams per year (Mg/yr) shall be exempt from the requirements of 40 CFR 61.342(b) and (c). 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:

i Wastes that are exempted from control under 40 CFR 61.342(c)(2) and 40 CFR 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.

ii. 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.

iii. 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 or more, wastes generated by remediation activities are subject to the requirements of 40 CFR 61.342(c) through (h). 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.

iv. 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).

38.b [40 CFR 61.342(b)]
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 paragraph (a) of 40 CFR 61.342 shall be in compliance with the requirements of paragraphs (c) through (h) of 40 CFR 61.342 no later than 90 days following the effective date, unless a waiver of compliance has been obtained under 40 CFR 61.11, or by the initial startup for a new source with an initial startup after the effective date.

i. The permittee of an existing source unable to comply with the rule within the required time may request a waiver of compliance under 40 CFR 61.10.

ii. As part of the waiver application, the permittee shall submit to the Administrator a plan under 40 CFR 61.10(b)(3) that is an enforceable commitment to obtain environmental benefits to mitigate the benzene emissions that result from extending the compliance date. The plan shall include the following information:

(1) A description of the method of compliance, including the control approach, schedule for installing controls, and quantity of the benzene emissions that result from extending the compliance date;

(2) If the control approach involves a compliance strategy designed to obtain integrated compliance with multiple regulatory requirements, a description of the other regulations involved and their effective dates; and

(3) A description of the actions to be taken at the facility to obtain mitigating environmental benefits, including how the benefits will be obtained, the schedule for these actions, and an estimate of the quantifiable benefits that directly result from these actions.

38.c [40 CFR 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 paragraph (a) of 40 CFR 61.342 shall manage and treat the facility waste as follows:

i. 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:

(1) Remove or destroy the benzene contained in the waste using a treatment process or wastewater treatment system that complies with the standards specified in 40 CFR 61.348 of this subpart.

(2) Comply with the standards specified in 40 CFR 61.343 through 61.347 of this subpart for each waste management unit that receives or manages the waste stream prior to and during treatment of the waste stream in accordance with paragraph (c)(1)(i) of 40 CFR 61.342.

(3) 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. 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 paragraph (c) of 40 CFR 61.342.

ii. A waste stream is exempt from paragraph (c)(1) of 40 CFR 61.342 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 40 CFR 61.355(c)(3).

iii. A waste stream is exempt from paragraph (c)(1) of 40 CFR 61.342 provided that the permittee demonstrates initially and, thereafter, at least once per year that the conditions specified in either paragraph (c)(3)(i) or (c)(3)(ii) of 40 CFR 61.342 are met.

(1) 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

(2) All of the following conditions are met:

(a) The permittee does not choose to exempt process wastewater under paragraph (c)(3)(i) of 40 CFR 61.342,

(b) The total annual benzene quantity in all waste streams chosen for exemption in paragraph (c)(3)(ii) of this section does not exceed 2.0 Mg/yr (2.2 ton/yr) as determined in the procedures in 40 CFR 61.355(j), and

(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.

38.d [40 CFR 61.342(d)]
As an alternative to the requirements specified in paragraphs (c) and (e) of 40 CFR 61.342, a 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:

i. 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.

ii. The permittee shall manage and treat process wastewater in accordance with the following requirements:

(1) 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.

(2) 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.

(3) 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.

38.e [40 CFR 61.342(e)]
As an alternative to the requirements specified in paragraphs (c) and (d) of 40 CFR 61.342, a 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:

i. 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

ii. 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:

(1) 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). 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.

(2) 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).

38.f [40 CFR 61.342(f)]
Rather than treating the waste onsite, a 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:

i. Comply with the standards specified in 40 CFR 61.343 through 61.347 of this subpart for each waste management unit that receives or manages the waste prior to shipment of the waste offsite.

ii. 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 this subpart.

38.g [40 CFR 61.342(g)]
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 of this subpart.

38.h [40 CFR 61.342(h)]
Permission to use an alternative means of compliance to meet the requirements of 40 CFR 61.342 through 61.352 of this subpart may be granted by the Administrator as provided in 40 CFR 61.353 of this subpart.

39. [40 CFR 61.343] Standards: Tanks - 40 CFR 61, subpart FF

39.a [40 CFR 61.343(a)]
Except as provided in paragraph (b) of 40 CFR 61.343 and in 40 CFR 61.351, the permittee shall meet the following standards for each tank in which the waste stream is placed in accordance with 40 CFR 61.342(c)(1)(ii). The standards in 40 CFR 61.343 apply to the treatment of the waste stream in a tank, including dewatering.

i. 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.

(1) The fixed-roof shall meet the following requirements:

(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) of this subpart.

(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.

(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:

(i) The purpose of the opening is to provide dilution air to reduce the explosion hazard;

(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); and

(iii) The pressure is monitored continuously to ensure that the pressure in the tank remains below atmospheric pressure.

(2) The closed-vent system and control device shall be designed and operated in accordance with the requirements of 40 CFR 61.349 of this subpart.

39.b [40 CFR 61.343(b)]
For a tank that meets all the conditions specified in paragraph (b)(1) of 40 CFR 61.343, the permittee may elect to comply with paragraph (b)(2) of 40 CFR 61.343 as an alternative to the requirements specified in paragraph (a)(1) of 40 CFR 61.343.

i. The waste managed in the tank complying with paragraph (b)(2) of 40 CFR 61.343 shall meet all of the following conditions:

(1) 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.

(2) The waste managed in the tank either:

(a) Has a maximum organic vapor pressure less than 5.2 kilopascals (kPa) (0.75 pounds per square inch (psi));

(b) 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 m3 (40,000 gal); or

(c) 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 m3 (20,000 gal).

ii. The permittee shall install, operate, and maintain a fixed roof as specified in paragraph (a)(1)(i).

iii. For each tank complying with paragraph (b) of 40 CFR 61.343, 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.

39.c [40 CFR 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.

39.d [40 CFR 61.343(d)]
Except as provided in 40 CFR 61.350 of this subpart, 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.

40. [40 CFR 61.345] Standards: Containers - 40 CFR 61, subpart FF

40.a [40 CFR 61.345(a)]
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) of this subpart:

i. 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:

(1) 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) of this subpart.

(2) Except as provided in paragraph (a)(4) of 40 CFR 61.345, 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. 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 paragraph (a)(4) of 40 CFR 61.345.

iii. Treatment of a waste in a container, including aeration, thermal or other treatment, shall be performed by the permittee in a manner such that whenever it is necessary for the container to be open while the waste is being treated, the container is located under a cover (e.g. enclosure) with a closed-vent system that routes all organic vapors vented from the container to a control device, except for cover and closed-vent systems that meet the requirements in paragraph (a)(4) of 40 CFR 61.345.

(1) The cover and all openings (e.g., doors, hatches) 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) of this subpart.

(2) The closed-vent system and control device shall be designed and operated in accordance with 40 CFR 61.349 of this subpart.

iv. 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:

(1) The purpose of the opening is to provide dilution air to reduce the explosion hazard;

(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 methods specified in 40 CFR 61.355(h); and

(3) The pressure is monitored continuously to ensure that the pressure in the container remains below atmospheric pressure.

40.b [40 CFR 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.

40.c [40 CFR 61.345(c)]
Except as provided in 40 CFR 61.350 of this subpart, 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.

41. [40 CFR 61.346] Standards: Individual Drain Systems - 40 CFR 61, subpart FF

41.a [40 CFR 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):

i 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.

(1) The cover shall meet the following requirements:

(a) 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).

(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 drain system except when it is necessary to use the opening for waste sampling or removal, or for equipment inspection, maintenance, or repair.

(c) If the cover and closed-vent system operate such that the individual drain system is maintained at a pressure less than atmospheric pressure, then paragraph (a)(1)(i)(B) of 40 CFR 61.346 does not apply to any opening that meets all of the following conditions:

(i) The purpose of the opening is to provide dilution air to reduce the explosion hazard;

(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); and

(iii) The pressure is monitored continuously to ensure that the pressure in the individual drain system remains below atmospheric pressure.

41.b [40 CFR 61.346(b)]
As an alternative to complying with 40 CFR 61.346(a), the permittee may elect to comply with the following requirements:

i Each drain shall be equipped with water seal controls or a tightly sealed cap or plug.

ii. 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.

(1) 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.

(2) One of the following methods shall be used to control emissions from the junction box vent pipe to the atmosphere:

(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.

(b) Connect the junction box vent pipe to a closed-vent system and control device in accordance with 40 CFR 61.349.

iii. 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.

iv. Equipment installed in accordance with paragraphs (b)(1), (b)(2), or (b)(3) of 40 CFR 61.346 shall be inspected as follows:

(1) 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.

(2) 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.

(3) 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.

(4) 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.

v. Except as provided in 40 CFR 61.350 of this subpart, 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.

42. [40 CFR 61.347] Standards: Oil-Water Separators - 40 CFR 61, subpart FF

42.a [40 CFR 61.347(a)]
Except as provided in 40 CFR 61.352 of this subpart, 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) of this subpart:

i. 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.

(1) The fixed-roof shall meet the following requirements:

(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) of this subpart.

(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.

(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:

(i) The purpose of the opening is to provide dilution air to reduce the explosion hazard;

(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); and

(iii) The pressure is monitored continuously to ensure that the pressure in the oil-water separator remains below atmospheric pressure.

(2) The closed-vent system and control device shall be designed and operated in accordance with the requirements of 40 CFR 61.349 of this subpart.

42.b [40 CFR 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.

42.c [40 CFR 61.347(c)]
Except as provided in 40 CFR 61.350 of this subpart, 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.

43. [40 CFR 61.348] Standards: Treatment Processes - 40 CFR 61, subpart FF

43.a [40 CFR 61.348(a)]
Except as provided in paragraph (a)(5) of 40 CFR 61.348 , the permittee shall treat the waste stream in accordance with the following requirements:

i. The permittee shall design, install, operate, and maintain a treatment process that either:

(1) 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,

(2) Removes benzene from the waste stream by 99 percent or more on a mass basis, or

(3) 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.

ii. Each treatment process complying with paragraphs (a)(1)(i) or (a)(1)(ii) of 40 CFR 61.348 shall be designed and operated in accordance with the appropriate waste management unit standards specified in 40 CFR 61.343 through 61.347 of this subpart.

For example, if a treatment process is a tank, then the permittee shall comply with 40 CFR 61.343 of this subpart.

iii. For the purpose of complying with the requirements specified in paragraph (a)(1)(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.

iv. A 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 in paragraph (a)(5) of 40 CFR 61.348.

v. If a permittee aggregates or mixes any combination of process wastewater, product tank drawdown, or landfill leachate subject to 40 CFR 61.342(c)(1) of this subpart 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 paragraph (b) of 40 CFR 61.348. These provisions apply to above-ground wastewater treatment systems as well as those that are at or below ground level.

43.b [40 CFR 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 paragraph (a)(5) of 40 CFR 61.348 for management and treatment in a wastewater treatment system shall comply with the following requirements:

i. 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 of this subpart.

ii. The provisions of paragraph (b)(1) of 40 CFR 61.348 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:

(1) 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) of this subpart; and

(2) 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:

(a) 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.

(b) 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 (0.008 to 0.7 pounds per liter), and a residence time in the range of 3 to 36 hours.

43.c [40 CFR 61.348(c)]
The permittee shall demonstrate that each treatment process or wastewater treatment system unit, except as provided in paragraph (d) of 40 CFR 61.348, achieves the appropriate conditions specified in paragraphs (a) or (b) of 40 CFR 61.348 in accordance with the following requirements:

i. Engineering calculations in accordance with requirements specified in 40 CFR 61.356(e) of this subpart; or

ii. Performance tests conducted using the test methods and procedures that meet the requirements specified in 40 CFR 61.355 of this subpart.

43.d [40 CFR 61.348(d)]
A treatment process or waste stream is in compliance with the requirements of this subpart 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:

i. 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;

ii. 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;

iii. 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 of this subpart;

iv. 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 of this subpart; or

v. 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.

43.e [40 CFR 61.348(e)]
Except as specified in paragraph (e)(3) of 40 CFR 61.348, 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.

i. 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. Except as provided in 40 CFR 61.350 of this subpart, 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. 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:

(1) The purpose of the opening is to provide dilution air to reduce the explosion hazard;

(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

(3) The pressure is monitored continuously to ensure that the pressure in the treatment process and wastewater treatment system unit remain below atmospheric pressure.

43.f [40 CFR 61.348(f)]
Except for treatment processes complying with paragraph (d) of 40 CFR 61.348, 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 paragraphs (a) or (b) of 40 CFR 61.348 by conducting a performance test using the test methods and procedures as required in 40 CFR 61.355 of this subpart.

43.g [40 CFR 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 of this subpart.

44. [40 CFR 61.349] Standards: Closed-vent Systems and Control Devices - 40 CFR 61, subpart FF

44.a [40 CFR 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 of this subpart, the permittee shall properly design, install, operate, and maintain the closed-vent system and control device in accordance with the following requirements:

i. The closed-vent system shall:

(1) 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) of this subpart.

(2) 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 this subpart shall install, maintain, and operate according to then 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.

(a) 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.

(b) 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.

(3) All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

(4) For each closed-vent system complying with paragraph (a) of 40 CFR 61.349, 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.

ii. The control device shall be designed and operated in accordance with the following conditions:

(1) An enclosed combustion device (e.g., a vapor incinerator, boiler, or process heater) shall meet one of the following conditions:

(a) Reduce the organic emissions vented to it by 95 weight percent or greater;

(b) 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

(c) Provide a minimum residence time of 0.5 seconds at a minimum temperature of 760 degrees Celsius (1,400 degrees Fahrenheit). 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.

(2) 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.

(3) A flare shall comply with the requirements of 40 CFR 60.18.

(4) 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:

(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.

(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.

(c) The permittee shall identify:

(i) The critical operating parameters that affect the emission control performance of the device;

(ii) 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

(iii) How these operating parameters will be monitored to ensure the proper operation and maintenance of the device.

(d) The permittee shall submit the information and data specified in paragraphs (a)(2)(iv) (B) and (C) of 40 CFR 61.349 to the Administrator prior to operation of the alternative control device.

(e) The Administrator will determine, based on the information submitted under paragraph (a)(2)(iv)(D) of 40 CFR 61.349, if the control device subiect 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. However, if the Administrator 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.

44.b [40 CFR 61.349(b)]
Each closed-vent system and control device used to comply with this subpart 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.

44.c [40 CFR 61.349(c)]
A permittee shall demonstrate that each control device, except for a flare, achieves the appropriate conditions specified in paragraph (a)(2) of 40 CFR 61.349 by using one of the following methods:

i. Engineering calculations in accordance with requirements specified in 40 CFR 61.356(f) of this subpart; or

ii. Performance tests conducted using the test methods and procedures that meet the requirements specified in 40 CFR 61.355 of this subpart.

44.d [40 CFR 61.349(d)]
A permittee shall demonstrate compliance of each flare in accordance with paragraph (a)(2)(iii) of 40 CFR 61.349.

44.e [40 CFR 61.349(e)]
The Administrator may request at any time a permittee demonstrate that a control device meets the applicable conditions specified in paragraph (a)(2) of 40 CFR 61.349 by conducting a

performance test using the test methods and procedures as required in 40 CFR 61.355, and for control devices subject to paragraph (a)(2)(iv) of 40 CFR 61.349, the Administrator may specify alternative test methods and procedures, as appropriate.

44.f [40 CFR 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 visable defects such as holes in ductwork or piping and loose connections.

44.g [40 CFR 61.349(g)]
Except as provided in 40 CFR 61.350 of this subpart, 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.

44.h [40 CFR 61.349(h)]
The permittee of a control device that is used to comply with the provisions of this section shall monitor the control device in accordance with 40 CFR 61.354(c) of this subpart.

45. [40 CFR 61.350] Standards: Delay of Repair - 40 CFR 61, subpart FF

45.a [40 CFR 61.350(a)]
Delay of repair of facilities or units that are subject to the provisions of this subpart will be allowed if the repair is technically impossible without a complete or partial facility or unit shutdown.

45.b [40 CFR 61.350(b)]
Repair of such equipment shall occur before the end of the next facility or unit shutdown.

46. [40 CFR 61.351] Alternative Standards for Tanks - 40 CFR 61, subpart FF

46.a [40 CFR 61.351(a)]
As an alternative to the standards for tanks specified in 40 CFR 61.343 of this subpart, a permittee may elect to comply with one of the following:

i. A fixed roof and internal floating roof meeting the requirements in 40 CFR 60.112b(a)(1);

ii. An external floating roof meeting the requirements of 40 CFR 60.112b (a)(2); or

iii. An alternative means of emission limitation as described in 40 CFR 60.114b.

46.b [40 CFR 61.351(b)]
If a permittee elects to comply with the provisions of this section, then the permittee is exempt from the provisions of 40 CFR 61.343 of this subpart applicable to the same facilities.

47. [40 CFR 61.352] Alternative standards for oil-water separators - 40 CFR 61, subpart FF

47.a [40 CFR 61.352(a)]
As an alternative to the standards for oil-water separators specified in 40 CFR 61.347 of this subpart, a permittee may elect to comply with one of the following:

i. A floating roof meeting the requirements in 40 CFR 60.693-2(a); or

ii. An alternative means of emission limitation as described in 40 CFR 60.694.

47.b [40 CFR 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 of this subpart shall be installed and operated.

47.c [40 CFR 61.352(c)]
Except as provided in paragraph (b) of 40 CFR 61.352, if a 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 of this subpart applicable to the same facilities.

48. [40 CFR 61.353] Alternative means of emission limitation - 40 CFR 61, subpart FF

48.a [40 CFR 61.353(a)]
If, in the Administrator'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 61.342 through 61.349, 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.

48.b [40 CFR 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.

48.c [40 CFR 61.353(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.

49. [40 CFR 61.354] Monitoring of Operations - 40 CFR Part 61, Subpart FF

49.a [40 CFR 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:

i. Measure the benzene concentration of the waste stream exiting the treatment process complying with 40 CFR 61.348(a)(1)(i) at least once per month by collecting and analyzing one or more samples using the procedures specified in 40 CFR 61.355(c)(3).

ii. 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.

49.b [40 CFR 61.354(b)]
If a permittee complies with the requirements of 40 CFR 61.348(b), 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:

i. 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), 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).

ii. 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).

49.c [40 CFR 61.354(c)]
A permittee subject to the requirements in 40 CFR 61.349 of this subpart 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. 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.

For a thermal oxidizer, a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of +/- 1 percent of the temperature being monitored in degrees Celsius or +/- 0.5 degrees Celsius, whichever is greater. The temperature sensor shall be installed at a representative location in the combustion chamber.

Should a control device other than the thermal oxidizer be operated for the benzene NESHAPS sewer system, the permittee shall comply with other applicable sections of 40 CFR 61.354(c) as deemed necessary.

49.d [40 CFR 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.

49.e [40 CFR 61.354(f)]
Permittees 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 this subpart shall do the following:

i. 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) to ensure that the valve is maintained in the closed position and the vent stream is not diverted through the bypass line.

ii. 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.

49.f [40 CFR 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.

50. [40 CFR 61.355] Test Methods, Procedures, and Compliance Provisions - 40 CFR Part 61, Subpart FF

50.a [40 CFR 61.355(a)]
A permittee shall determine the total annual benzene quantity from facility waste by the following procedure:

i. 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), the permittee shall:

(1) Determine the annual waste quantity for each waste stream using the procedures specified in paragraph (b) of 40 CFR 61.355.

(2) Determine the flow-weighted annual average benzene concentration for each waste stream using the procedures specified in paragraph (c) of 40 CFR 61.355.

(3) 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. 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 paragraph (b)(4) of 40 CFR 61.355.

iii. If the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr (11 ton/yr), then the permittee shall comply with the requirements of 40 CFR 61.342 (c), (d), or (e).

iv. 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:

(1) Comply with the recordkeeping requirements of 40 CFR 61.356 and reporting requirements of 40 CFR 61.357 of this subpart; and

(2) 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. If the total annual benzene quantity from facility waste is less than 1 Mg/yr (1.1 ton/yr), then the permittee shall:

(1) Comply with the recordkeeping requirements of 40 CFR 61.356 and reporting requirements of 40 CFR 61.357 of this subpart; and

(2) 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. 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.

50.b [40 CFR 61.355(b)]
For purposes of the calculation required by paragraph (a) of 40 CFR 61.355, a permittee shall determine the annual waste quantity at the point of waste generation, unless otherwise provided in paragraphs (b) (1), (2), (3), and (4) of 40 CFR 61.355, by one of the methods given in paragraphs (b) (5) through (7) of 40 CFR 61.355.

i. 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. The determination of annual waste quantity for wastes at coke by-product plants subject to and complying with the control requirements of 40 CFR 61.132, 61.133, 61.134, or 61.139 of subpart L of this part shall be made at the location that the waste stream exits the process unit component or waste management unit controlled by that subpart or at the exit of the ammonia still, provided that the following conditions are met:

(1) The transfer of wastes between units complying with the control requirements of subpart L of this part, process units, and the ammonia still is made through hard piping or other enclosed system.

(2) The ammonia still meets the definition of a sour water stripper in 40 CFR 61.341.

iii. 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.

iv. 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 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 turnaround. For estimates of total annual benzene quantity as specified in the 90-day report, required

under 40 CFR 61.357(a)(1), 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.

v. 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;

vi. Use the maximum design capacity of the waste management unit; or

vii. Use measurements that are representative of maximum waste generation rates.

50.c [40 CFR 61.355(c)]
For the purposes of the calculation required by 40 CFR 61.355(a) of this subpart, a 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. The determination of flow-weighted annual average benzene concentration shall meet all of the following criteria:

(1) 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.

(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.

(b) The determination for wastes at coke by-product plants subject to and complying with the control requirements of 40 CFR 61.132, 61.133, 61.134, or 61.139 of subpart L of this part shall be made at the location that the waste stream exits the process unit component or waste management unit controlled by that subpart or at the exit of the ammonia still, provided that the following conditions are met:

(i) The transfer of wastes between units complying with the control requirements of subpart L of this part, process units, and the ammonia still is made through hard piping or other enclosed system.

(ii) The ammonia still meets the definition of a sour water stripper in 40 CFR 61.341.

(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.

(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.

(2) Volatilization of the benzene by exposure to air shall not be used in the determination to reduce the benzene concentration.

(3) Mixing or diluting the waste stream with other wastes or other materials shall not be used in the determination - to reduce the benzene concentration.

(4) 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.

(5) 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. 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 paragraph (c)(3) of 40 CFR 61.355 shall be used to resolve the disagreement.

iii. Measurements of the benzene concentration in the waste stream in accordance with the following procedures:

(1) 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.

(2) For waste in enclosed pipes, the following procedures shall be used:

(a) Samples shall be collected prior to the waste being exposed to the atmosphere in order to minimize the loss of benzene prior to sampling.

(b) A static mixer shall be installed in the process line or in a bypass 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.

(c) The sampling tap shall be located within two pipe diameters of the static mixer outlet.

(d) Prior to the initiation of sampling, sample lines and cooling coil shall be purged with at least four volumes of waste.

(e) 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.

(f) Samples shall be collected at a flow rate such that the cooling coil is able to maintain a waste temperature less than 10 degrees Celsius (50 degrees Fahrenheit).

(g) After filling, the sample container shall be capped immediately (within 5 seconds) to leave a minimum headspace in the container.

(h) The sample containers shall immediately be cooled and maintained at a temperature below 10 degrees Celsius (50 degrees Fahrenheit) for transfer to the laboratory.

(3) 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.

(4) Each waste sample shall be analyzed using one of the following test methods for determining the benzene concentration in a waste stream:

(a) 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 of this part);

(b) 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 of this part);

(c) 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 in 40 CFR 61.18 of this part);

(d) 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 of this part);

(e) 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

(f) 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.

(5) The flow-weighted annual average benzene concentration shall be calculated by averaging the results of the sample analyses as follows:

C = (1/Qt)[(Sum i=1 to n)(Qi)(Ci)]

Where:

C =Flow-weighted annual average benzene concentration for waste stream, ppmw.

Qt=Total annual waste quantity for waste stream, kg/yr (lb/yr).

n=Number of waste samples (at least 3).

Qi=Annual waste quantity for waste stream represented by Ci, kg/yr (lb/yr).

Ci=Measured concentration of benzene in waste sample i, ppmw.

50.d [40 CFR 61.355(d)]
A permittee using performance tests to demonstrate compliance of a treatment process with 40 CFR 61.348 (a)(1)(i) 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 paragraph (c)(3) of 40 CFR 61.355. 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.

50.e [40 CFR 61.355(e)]
A permittee using performance tests to demonstrate compliance of a treatment process with 40 CFR 61.348(a)(1)(ii) of this subpart shall determine the percent reduction of benzene in the waste stream on a mass basis by the following procedure:

i. 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. All testing equipment shall be prepared and installed as specified in the appropriate test methods.

iii. The mass flow rate of benzene entering the treatment process (Eb) 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:

Eb = K/(n x 10^6)[Sum i=1 to n (Vi)(Ci)]

Where:

Eb = Mass flow rate of benzene entering the treatment process, kg/hr (lb/hr).

K = Density of the waste stream, kg/m3 (lb/ft3).

Vi = Average volume flow rate of waste entering the treatment process during each run i, m3/hr (ft3/hr).

Ci = Average concentration of benzene in the waste stream entering the treatment process during each run i, ppmw.

n = Number of runs.

10^6 = Conversion factor for ppmw.

iv. The mass flow rate of benzene exiting the treatment process (Ea) 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:

Ea = K/(n x 10^6)[Sum i=1 to n (Vi)(Ci)]

Where:

Ea = Mass flow rate of benzene exiting the treatment process, kg/hr (lb/hr).

K = Density of the waste stream, kg/m3 (lb/ft3).

Vi = Average volume flow rate of waste exiting the treatment process during each run i, m3/hr (ft3/hr).

Ci = Average concentration of benzene in the waste stream exiting the treatment process during each run i, ppmw.

n = Number of runs.

10^6 = Conversion factor for ppmw.

50.f [40 CFR 61.355(f)]
A permittee using performance tests to demonstrate compliance of a treatment process with 40 CFR 61.348(a)(1)(iii) of this subpart shall determine the benzene destruction efficiency for the combustion unit by the following procedure:

i. 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. All testing equipment shall be prepared and installed as specified in the appropriate test methods.

iii. 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:

Eb = K/(n x 10^6)[Sum i=1 to n (Vi)(Ci)]

Where:

Eb = Mass flow rate of benzene entering the combustion unit, kg/hr (lb/hr).

K = Density of the waste stream, kg/m3 (lb/ft3).

Vi = Average volume flow rate of waste entering the combustion unit during each run i, m3/hr (ft3/hr).

Ci = Average concentration of benzene in the waste stream entering the combustion unit during each run i, ppmw.

n = Number of runs.

10^6 = Conversion factor for ppmw.

iv. The mass flow rate of benzene exiting the combustion unit exhaust stack shall be determined as follows:

(1) 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.

(2) A run shall consist of a 1-hour period during the test. For each run:

(a) The reading from each measurement shall be recorded;

(b) The volume exhausted shall be determined using Method 2, 2A, 2C, or 2D from appendix A of 40 CFR part 60, as appropriate.

(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.

(3) The mass of benzene emitted during each run shall be calculated as follows:

Mi = DbVC(10^-6)

Where:

Mi = Mass of benzene emitted during run i, kg (lb).

V = Volume of air-vapor mixture exhausted at standard conditions, m3 (ft3).

C = Concentration of benzene measured in the exhaust, ppmv.

Db = Density of benzene, 3.24 kg/m3 (0.202 lb/ft3).

10^6 = Conversion factor for ppmv.

(4) The benzene mass emission rate in the exhaust shall be calculated as follows:

Ea = [(Sum i=1 to n)(Mi)]/T

Where:

Ea = Mass flow rate of benzene emitted from the combustion unit, kg/hr (lb/hr).

Mi = Mass of benzene emitted from the combustion unit during run i, kg (lb).

T = Total time of all runs, hr.

n = Number of runs.

v. The benzene destruction efficiency for the combustion unit shall be calculated as follows:

R = [(Eb - Ea)/Eb] x 100

Where:

R = Benzene destruction efficiency for the combustion unit, percent.

Eb = Mass flow rate of benzene entering the combustion unit, kg/hr (lb/hr).

Ea = Mass flow rate of benzene emitted from the combustion unit, kg/hr (lb/hr).

50.g [40 CFR 61.355(g)]
A permittee using performance tests to demonstrate compliance of a wastewater treatment system unit with 40 CFR 61.348(b) 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 paragraph (c)(3) of 40 CFR 61.355. 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.

50.h [40 CFR 61.355(h)]
A permittee shall test equipment for compliance with no detectable emissions as required in 40 CFR 61.343 through 61.347, and 40 CFR 61.349 of this subpart in accordance with the following requirements:

i. Monitoring shall comply with Method 21 from appendix A of 40 CFR part 60.

ii. The detection instrument shall meet the performance criteria of Method 21.

iii. The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21.

iv. Calibration gases shall be:

(1) Zero air (less than 10 ppm of hydrocarbon in air); and

(2) 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. The background level shall be determined as set forth in Method 21.

vi. The instrument probe shall be traversed around all potential leak interfaces as close as possible to the interface as described in Method 21.

vii. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared to 500 ppm for determining compliance.

50.i [40 CFR 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) shall use the following procedures:

i. 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. Sampling sites shall be selected using Method 1 or 1A from appendix A of 40 CFR part 60, as appropriate.

iii. The mass flow rate of either the organics or benzene entering and exiting the control device shall be determined as follows:

(1) 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.

(2) A run shall consist of a 1-hour period during the test. For each run:

(a) The reading from each measurement shall be recorded;

(b) The volume exhausted shall be determined using Method 2, 2A, 2C, or 2D from appendix A of 40 CFR part 60, as appropriate;

(c) 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 appendix A of 40 CFR part 60.

(3) The mass of organics or benzene entering and exiting the control device during each run shall be calculated as follows:

Maj = [(K1)(Vaj)]/10^6[Sum i=1 to n (Cai)(MWi)]

Mbj = [(K1)(Vbj)]/10^6[Sum i=1 to n (Cbi)(MWi)]

Where:

Maj = Mass of organics or benzene in the vent stream entering the control device during run j, kg (lb).

Mbj = Mass of organics or benzene in the vent stream exiting the control device during run j, kg (lb).

Vaj = Volume of vent stream entering the control device during run j, at standard conditions, m3 (ft3).

Vbj = Volume of vent stream exiting the control device during run j, at standard conditions, m3 (ft3).

Cai = Organic concentration of compound i or the benzene concentration measured in the vent stream entering the control device as determined by Method 18, ppm by volume on a dry basis.

Cbi = Organic concentration of compound i or the benzene concentration measured in the vent stream exiting the control device as determined by Method 18, ppm by volume on a dry basis.

MWi = Molecular weight of organic compound i in the vent stream, or the molecular weight of benzene, kg/kg-mol (lb/lb-mole).

n = Number of organic compounds in the vent stream; if benzene reduction efficiency is being demonstrated, then n=1.

K1 = Conversion factor for molar volume at standard conditions (293 K and 760 mm Hg (527 R and 14.7 psia))
= 0.0416 kg-mol/m3 (0.00118 lb-mol/ft3)

10^6=Conversion factor for ppmv.

(4) The mass flow rate of organics or benzene entering and exiting the control device shall be calculated as follows:

Ea - [(Sum j=1 to n) Maj]/T

Eb - [(Sum j=1 to n) Mbj]/T

Where:

Ea = Mass flow rate of organics or benzene entering the control device, kg/hr (lb/hr).

Eb = Mass flow rate of organics or benzene exiting the control device, kg/hr (lb/hr).

Maj = Mass of organics or benzene in the vent stream entering the control device during run j, kg (lb).

Mbj = Mass of organics or benzene in the vent stream exiting the control device during run j, kg (lb).

T = Total time of all runs, hr.

n = Number of runs.

iv. The organic reduction efficiency or the benzene reduction efficiency for the control device shall be calculated as follows:

R = [(Ea - Eb)/Ea] x 100

Where:

R = Total organic reduction of efficiency or benzene reduction efficiency for the control device, percent.

Eb = Mass flow rate of organics or benzene entering the control device, kg/hr (lb/hr).

Ea = Mass flow rate of organic or benzene emitted from the control device, kg/hr (lb/hr).

50.j [40 CFR 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) according to the provisions of paragraph (a) of 40 CFR 61.355, except that the procedures in paragraph (a) of 40 CFR 61.355 shall also apply to wastes with a water content of 10 percent or less.

50.k [40 CFR 61.355(k)]
A permittee shall determine the benzene quantity for the purposes of the calculation required by 40 CFR 61.342(e)(2) by the following procedure:

i. 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. 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), 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.

(1) 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,

(2) 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

(3) 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.

(4) Annual waste quantity shall be determined using the procedures in paragraphs (b)(5), (6), or (7) of 40 CFR 61.355, and

(5) 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. 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) of 40 CFR 61.355.

iv. The benzene in waste entering an enhanced biodegradation unit, as defined in 40 CFR 61.348(b)(2)(ii)(B), 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:

(1) 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

(2) 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).

v. 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. The total benzene quantity for the purposes of the calculation required by 40 CFR 61.342(e)(2) 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. If the benzene quantity determined in paragraph (6) of 40 CFR 61.355(k) 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):

(1) Determine which waste management units are involved in the multiple counting of benzene;

(2) 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.

(3) 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).

(4) Submit in the annual report required under 40 CFR 61.357(a) 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.

51. [40 CFR 61.356] Record Keeping Requirements - 40 CFR Part 61, Subpart FF

51.a [40 CFR 61.356(a)]
Each permittee of a facility subject to the provisions of this subpart shall comply with the recordkeeping 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.

51.b [40 CFR 61.356(b)]
Each permittee shall maintain records that identify each waste stream at the facility subject to this subpart, 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:

i. 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.

ii. For each waste stream exempt from 40 CFR 61.342(c)(1) in accordance with 40 CFR 61.342(c)(3), the records shall include:

(1) 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), or

(2) 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).

iii. For each facility where process wastewater streams are controlled for benzene emissions in accordance with 40 CFR 61.342(d) of this subpart, 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.

iv. 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).

v. For each facility where the annual waste quantity for process unit turnaround waste is determined in accordance with 40 CFR 61.355(b)(5), 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), 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).

vi. For each facility where wastewater streams are controlled for benzene emissions in accordance with 40 CFR 61.348(b)(2), 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.

51.c [40 CFR 61.356(c)]
A permittee transferring waste off-site to another facility for treatment in accordance with 40 CFR 61.342(f) 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.

51.d [40 CFR 61.356(d)]
A permittee using control equipment in accordance with 40 CFR 61.343 through 61.347 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 paragraph (f) of 40 CFR 61.356.

51.e [40 CFR 61.356(e)]
A permittee using a treatment process or wastewater treatment system unit in accordance with 40 CFR 61.348 of this subpart shall maintain the following records. The documentation shall be retained for the life of the unit.

i. 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.

ii. 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.

iii. 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.

(1) 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.

(2) 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.

(3) Records of unit operating conditions during each test run including all key process parameters.

(4) All test results.

iv. If a control device is used, then the permittee shall maintain the control device records required by paragraph (f) of 40 CFR 61.356.

51.f [40 CFR 61.356(f)]
A permittee using a closed-vent system and control device in accordance with 40 CFR 61.349 of this subpart shall maintain the following records. The documentation shall be retained for the life of the control device.

i. 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.

ii. 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:

(1) 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:

(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.

(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.

(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.

(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.

(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.

(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.

(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.

(h) For a control device subject to the requirements of 40 CFR 61.349(a)(2)(iv), 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).

iii. If performance tests are used to determine control device performance in accordance with 40 CFR 61.349(c) of this subpart:

(1) 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.

(2) 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.

(3) 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.

(4) All test results.

51.g [40 CFR 61.356(g)]
The permittee shall maintain a record for each visual inspection required by 40 CFR 61.343 through 61.347 of this subpart 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.

51.h [40 CFR 61.356(h)]
The permittee shall maintain a record for each test of no detectable emissions required by 40 CFR 61.343 through 61.347 and 40 CFR 61.349 of this subpart. 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.

51.i [40 CFR 61.356(i)]
For each treatment process and wastewater treatment system unit operated to comply with 40 CFR 61.348, the permittee shall maintain documentation that includes the following information regarding the unit operation:

i. Dates of startup and shutdown of the unit.

ii. If measurements of waste stream benzene concentration are performed in accordance with 40 CFR 61.354(a)(1) of this subpart, the permittee shall maintain records that include date each test is performed and all test results.

iii. If a process parameter is continuously monitored in accordance with 40 CFR 61.354(a)(2) of this subpart, 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.

iv. If measurements of waste stream benzene concentration are performed in accordance with 40 CFR 61.354(b), the permittee shall maintain records that include the date each test is performed and all test results.

v. Periods when the unit is not operated as designed.

51.j [40 CFR 61.356(j)]
For each control device, the permittee shall maintain documentation that includes the following information regarding the control device operation:

i. Dates of startup and shutdown of the closed-vent system and control device.

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). This documentation shall be kept for the life of the control device.

iii. Periods when the closed-vent system and control device are not operated as designed including all periods and the duration when:

(1) Any valve car-seal or closure mechanism required under 40 CFR 61.349(a)(1)(ii) is broken or the bypass line valve position has changed.

(2) The flow monitoring devices required under 40 CFR 61.349(a)(1)(ii) indicate that vapors are not routed to the control device as required.

iv. 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 degrees Celsius (50 degrees Fahrenheit) below the design combustion zone temperature.

v. 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 degrees Celsius (50 degrees Fahrenheit) 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.

vi. 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). For a boiler or process heater having a design heat input capacity less than 44 MW (150 x 10^6 BTU/hr), 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 degrees Celsius (50 degrees Fahrenheit) 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/hr), the permittee shall maintain continuous records of the parameter(s) monitored in accordance with the requirements of 40 CFR 61.354(c)(5).

vii. 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.

viii. 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 degrees Celsius (11 degrees Fahrenheit) above the design average exhaust vent stream temperature, or the temperature of the coolant fluid exiting the condenser is more than 6 degrees Celsius (11 degrees Fahrenheit) above the design average coolant fluid temperature at the condenser outlet.

ix. 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.

x. 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.

xi. If an alternative operational or process parameter is monitored for a control device, as allowed in 40 CFR 61.354(e) of this subpart, then the permittee shall maintain records of the continuously monitored parameter, including periods when the device is not operated as designed.

xii. If a control device subject to the requirements of 40 CFR 61.349(a)(2)(iv) 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), or other records as specified by the Administrator.

51.k [40 CFR 61.356(k)]
A permittee who elects to install and operate the control equipment in 40 CFR 61.351 of this subpart shall comply with the recordkeeping requirements in 40 CFR 60.115b.

51.l [40 CFR 61.356(l)]
A permittee who elects to install and operate the control equipment in 40 CFR 61.352 of this subpart shall maintain records of the following:

i. 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.

ii. Results of the seal gap measurements required by 40 CFR 60.693-2(a).

51.m [40 CFR 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.

52. [40 CFR 61.357] Reporting Requirements - 40 CFR 61, subpart FF

52.a [40 CFR 61.357(a)]
Each permittee of a chemical plant, petroleum refinery, coke by-product recovery plant, and any facility managing wastes from these industries shall submit to the Administrator within 90 days after January 7, 1993, or by the initial startup for a new source with an initial startup after the effective date, a report that summarizes the regulatory status of each waste stream subject to 40 CFR 61.342 and is determined by the procedures specified in 40 CFR 61.355(c) to contain benzene. Each permittee subject to this subpart who has no benzene onsite in wastes, products, by-products, or intermediates shall submit an initial report that is a statement to this effect. For all other permittees subject to this subpart, the report shall include the following information:

i. Total annual benzene quantity from facility waste determined in accordance with 40 CFR 61.355(a) of this subpart.

ii. A table identifying each waste stream and whether or not the waste stream will be controlled for benzene emissions in accordance with the requirements of this subpart.

iii. For each waste stream identified as not being controlled for benzene emissions in accordance with the requirements of this subpart the following information shall be added to the table:

(1) Whether or not the water content of the waste stream is greater than 10 percent;

(2) Whether or not the waste stream is a process wastewater stream, product tank drawdown, or landfill leachate;

(3) Annual waste quantity for the waste stream;

(4) Range of benzene concentrations for the waste stream;

(5) Annual average flow-weighted benzene concentration for the waste stream; and

(6) Annual benzene quantity for the waste stream.

iv. The information required in paragraphs (a) (1), (2), and (3) of 40 CFR 61.357should represent the waste stream characteristics based on current configuration and operating conditions. A 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).

52.b [40 CFR 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 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.

52.c [40 CFR 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.

52.d [40 CFR 61.357(d)]
If the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr (11 ton/yr), then the permittee shall submit to the Administrator the following reports:

i. Within 90 days after January 7, 1993, unless a waiver of compliance under 40 CFR 61.11 of this part is granted, or by the date of initial startup for a new source with an initial startup after the effective date, 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. If a waiver of compliance is granted under 40 CFR 61.11, the certification of equipment necessary to comply with these standards shall be submitted by the date the waiver of compliance expires.

ii. Beginning on the date that the equipment necessary to comply with these standards has been certified in accordance with paragraph (d)(1) of 40 CFR 61.357, the permittee shall submit annually to the Administrator a report that updates the information listed in paragraphs (a)(1) through (a)(3) of 40 CFR 61.357. 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.

iii. If a permittee elects to comply with the requirements of 40 CFR 61.342(c)(3)(ii), then the report required by paragraph (d)(2) of 40 CFR 61.357 shall include a table identifying each waste stream chosen for exemption and the total annual benzene quantity in these exempted streams.

iv. If a permittee elects to comply with the alternative requirements of 40 CFR 61.342(d) of this subpart, then he 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:

(1) Whether or not the process wastewater stream is being controlled for benzene emissions in accordance with the requirements of this subpart;

(2) For each process wastewater stream identified as not being controlled for benzene emissions in accordance with the requirements of this subpart, 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;

(3) For each process wastewater stream identified as being controlled for benzene emissions in accordance with the requirements of this subpart, 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. If a 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:

(1) For each waste stream identified as not being controlled for benzene emissions in accordance with the requirements of this subpart; 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;

(2) For each waste stream identified as being controlled for benzene emissions in accordance with the requirements of this subpart; 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. Beginning 3 months after the date that the equipment necessary to comply with these standards has been certified in accordance with paragraph (d)(1) of 40 CFR 61.357, the permittee shall submit quarterly to the Administrator a certification that all of the required inspections have been carried out in accordance with the requirements of this subpart.

vii. Beginning 3 months after the date that the equipment necessary to comply with these standards has been certified in accordance with paragraph (d)(1) of 40 CFR 61.357, the permittee shall submit a report quarterly to the Administrator that includes:

(1) If a treatment process or wastewater treatment system unit is monitored in accordance with 40 CFR 61.354(a)(1) of this subpart, 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.

(2) If a treatment process or wastewater treatment system unit is monitored in accordance with 40 CFR 61.354(a)(2) of this subpart, 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.

(3) If a treatment process or wastewater treatment system unit is monitored in accordance with 40 CFR 61.354(b), 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.

(4) For a control device monitored in accordance with 40 CFR 61.354(c) of this subpart, each period of operation monitored during which any of the following conditions occur, as applicable to the control device:

(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 degrees Celsius (50 degrees Fahrenheit) below the design combustion zone temperature.

(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 degrees Celsius (50 degrees Fahrenheit) 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.

(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/hr), as mesured by the temperature monitoring device, is more than 28 degrees Celsius (50 degrees Fahrenheit) below the design combustion zone temperature.

(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.

(e) Each 3-hour period of operation during which the temperature of the condenser exhaust vent stream is more than 6 degrees Celsius (11 degrees Fahrenheit) above the design average exhaust vent stream temperature, or the temperature of the coolant fluid exiting the condenser is more than 6 degrees Celsius (11 degrees Fahrenheit) above the design average coolant fluid temperature at the condenser outlet.

(f) Each period in which the pilot flame of a flare is absent.

(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) of this subpart.

(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.

(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) of this subpart.

(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), or any other periods specified by the Administrator for a control device subject to the requirements of 40 CFR 61.349(a)(2)(iv).

(5) For a cover and closed-vent system monitored in accordance with 40 CFR 61.354(g), the permittee shall submit a report 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. Beginning one year after the date that the equipment necessary to comply with these standards has been certified in accordance with paragraph (d)(1) of 40 CFR 61.357, the permittee shall submit annually to the Administrator a report that summarizes all inspections required by 40 CFR 61.342 through 61.354 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.

52.e [40 CFR 61.357(e)]
A permittee electing to comply with the provisions of 40 CFR 61.351 or 61.352 of this subpart shall notify the Administrator of the alternative standard selected in the report required under 40 CFR 61.07 or 40 CFR 61.10 of this part.

52.f [40 CFR 61.357(f)]
A permittee who elects to install and operate the control equipment in 40 CFR 61.351 of this subpart shall comply with the reporting requirements in 40 CFR 60.115b.

52.g [40 CFR 61.357(g)]
A permittee who elects to install and operate the control equipment in 40 CFR 61.352 of this subpart shall submit initial and quarterly reports that identify all seal gap measurements, as required in 40 CFR 60.693-2(a), that are outside the prescribed limits.

53. The permittee may be subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Organic Liquids Distribution, 40 CFR Part 63, Subpart EEEE and for Industrial, Commercial and Institutional Boilers and Process Heaters, 40 CFR Part 63, Subpart DDDDD. U.S. EPA failed to promulgate these standards 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.

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:

a. for a new affected source, the anticipated date of startup of operation;

b. 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;

c. any existing federal, State, or local limitations or requirements applicable to the affected source;

d. for each affected emission point or group of affected emission points, an identification of control technology in place;

e. information relevant to establishing the MACT floor (or MACT emission limitation), and, at the option of the permittee, a recommended MACT floor; and

f. 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:

a. 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);

b. 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

c. relevant parameters to be monitored and frequency of monitoring to demonstrate continuous compliance with the MACT emission limitation over the applicable reporting period.

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:

a. 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):

   i. the name and mailing address of the permittee;

   ii. the physical location of the source if it is different from the mailing address;

   iii. identification of the relevant MACT standard and the source's compliance date;

   iv. 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

   v. a statement confirming the facility is a major source for HAPs.

b. 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:

i. the methods used to determine compliance;

ii. the results of any performance tests, visible emission observations, continuous monitoring systems performance evaluations, and/or other monitoring procedures or methods that were conducted;

iii. the methods that will be used for determining continuous compliance, including a description of monitoring and reporting requirements and test methods;

iv. 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;

v. an analysis demonstrating whether the affected source is a major source or an area source;

vi. 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

vii. a statement of whether or not the permittee has complied with the requirements of the relevant Subpart.

Subpart GGGGG--National Emission Standards for Hazardous Air Pollutants: Site Remediation

What this Subpart Covers

54. 63.7880 What is the purpose of this subpart?

This subpart establishes national emissions limitations and work practice standards for hazardous air pollutants (HAP) emitted from site remediation activities. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emissions limitations and work practice standards.

55. 63.7881 Am I subject to this subpart?

(a) This subpart applies to you if you own or operate a facility at which you conduct a site remediation, as defined in §63.7957; and this site remediation, unless exempted under paragraph (b) or (c) of this section, meets all three of the following conditions specified in paragraphs (a)(1) through (3) of this section.

(1) Your site remediation cleans up a remediation material, as defined in §63.7957.

(2) Your site remediation is co-located at your facility with one or more other stationary sources that emit HAP and meet an affected source definition specified for a source category that is regulated by another subpart under 40 CFR part 63. This condition applies regardless whether or not the affected stationary source(s) at your facility is subject to the standards under the applicable subpart(s).

(3) Your facility is a major source of HAP as defined in §63.2. A major source emits or has the potential to emit any single HAP at the rate of 10 tons (9.07 megagrams) or more per year of any HAP or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year. All emissions of HAP from every source at your facility (i.e., both the site remediation activity and all other facility activities) must be considered in making this calculation.

(b) You are not subject to this subpart if your site remediation qualifies for any of one of the exemptions listed in paragraphs (b)(1) through (6) of this section.

(1) Your site remediation is not subject to this subpart if the site remediation only cleans up material that does not contain any of the HAP listed in Table 1 of this subpart.

(2) Your site remediation is not subject to this subpart if the site remediation will be performed under the authority of the Comprehensive Environmental Response and Compensation Liability Act (CERCLA) as a remedial action or a non time-critical removal action.

(3) Your site remediation is not subject to this subpart if the site remediation will be performed under a Resource Conservation and Recovery Act (RCRA) corrective action conducted at a treatment, storage and disposal facility (TSDF) that is either required by your permit
issued by either the U.S. Environmental Protection Agency (EPA) or a State program authorized by the EPA under RCRA section 3006; required by orders authorized under RCRA; or required by orders authorized under RCRA section 7003.

(4) Your site remediation is not subject to this subpart if the site remediation is conducted at a gasoline service station to clean up remediation material from a leaking underground storage tank.

(5) Your site remediation is not subject to this subpart if the site remediation is conducted at a farm or residential site.

(6) Your site remediation is not subject to this subpart if the site remediation is conducted at a research and development facility that meets the requirements under Clean Air Act (CAA) section 112(c)(7).

(c) Your site remediation is not subject to this subpart, except for the recordkeeping requirements specified in this paragraph, if the site remediation meets the all of the conditions in paragraphs (c)(1) through (3) of this section.

(1) Before beginning the site remediation, you determine for the remediation material that you will excavate, extract, pump, or otherwise remove during your site remediation that the total quantity of the HAP listed in Table 1 of this subpart which is contained in the material is less than 1 megagram per year (Mg/yr).

(2) You prepare and maintain at your facility written documentation to support your determination of the total HAP quantity used to demonstrate compliance with paragraph (c)(1) of this section. This documentation must include a description of your methodology and data you used for determining the total HAP content of the material.

(3) This exemption may be applied to more than one site remediation at your facility provided that the total quantity of the HAP listed in Table 1 of this subpart for all of your site remediations exempted under this provision is less than 1 Mg/yr.

(d) Your site remediation is not subject to the requirements of this subpart if all remediation activities at your facility subject to this subpart are completed and you have notified the Administrator in writing that all remediation activities subject to this subpart are completed. You must maintain records of compliance, in

accordance with §63.7953, for each remediation activity that was subject to this subpart. All future remediation activity meeting the applicability criteria in this section must comply with the requirements of this subpart.

56. 63.7882 What site remediation sources at my facility does this subpart affect?

(a) This subpart applies to each new, reconstructed, or existing affected source for your site remediation as designated by paragraphs (a)(1) through (3) of this section.

(1) Process vents. The affected source is the entire group of process vents associated with the in-situ and ex-situ remediation processes used at your site to remove, destroy, degrade, transform, or immobilize hazardous substances in the remediation material subject to remediation. Examples of such in-situ remediation processes include, but are not limited to, soil vapor extraction and bioremediation processes. Examples of such ex-situ remediation processes include but are not limited to, thermal desorption, bioremediation, and air stripping processes.

(2) Remediation material management units. Remediation material management unit means a tank, surface impoundment, container, oil-water separator, organic-water separator, or transfer system, as defined in §63.7957, and is used at your site to manage remediation material. The affected source is the entire group of remediation material management units used for the site remediations at your site. For the purpose of this subpart, a tank or container that is also equipped with a vent that serves as a process vent, as defined in §63.7957, is not a remediation material management unit, but instead this unit is considered to be a process vent affected source under paragraph (a)(1) of this section.

(3) Equipment leaks. The affected source is the entire group of equipment components (pumps, valves, etc.) used to manage remediation materials and meeting both of the conditions specified in paragraphs (a)(3)(i) and (ii) of this section. If either of these conditions do not apply to an equipment component, then that component is not part of the affected source for equipment leaks.

(i) The equipment component contains or contacts remediation material having a concentration of total HAP listed in Table 1 of this subpart equal to or greater than 10 percent by weight.

(ii) The equipment component is intended to operate for 300 hours or more during a calendar year in remediation material service, as defined in §63.7957.

(b) Each affected source for your site is existing if you commenced construction or reconstruction of the affected source before July 30, 2002.

(c) Each affected source for your site is new if you commenced construction or reconstruction of the affected source on or after July 30, 2002. An affected source is reconstructed if it meets the definition of reconstruction in §63.2.

57. 63.7883 When do I have to comply with this subpart?

(a) If you have an existing affected source, you must comply with each emission limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you no later than [INSERT DATE 3 YEARS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER].

(b) If you have a new affected source that manages remediation material other than a radioactive mixed waste as defined in §63.7957, then you must meet the compliance date specified in paragraph (b)(1) or (2) of this section, as applicable to your affected source.

(1) If the affected source's initial startup date is on or before [INSERT DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER], you must comply with each emission limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you by [INSERT DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER].

(2) If the affected source's initial startup date is after [INSERT DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER], you must comply with each emission limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you upon initial startup.

(c) If you have a new affected source that manages remediation material that is a radioactive mixed waste as defined in §63.7957, then you must meet the compliance date specified in paragraph (c)(1) or (2) of this section, as applicable to your affected source.

(1) If the affected source's initial startup date is on or before [INSERT DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER], you must comply with each emission limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you no later than [INSERT DATE 3 YEARS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER].

(2) If the affected source's initial startup date is after [INSERT DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER], you must comply with each emission limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you upon initial startup.

(d) If your facility is an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP as defined in §63.2, then you must meet the compliance dates specified in paragraphs (d)(1) and (2) of this section.

(1) For each source at your facility that is a new affected source subject to this subpart, you must comply with each emission limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you upon initial startup.

(2) For all other affected sources subject to this subpart, you must comply with each emission limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you no later than 3 years after your facility becomes a major source.

(e) You must meet the notification requirements, according to the schedule applicable to your facility, as specified in §63.7950 and in 40 CFR part 63, subpart A. Some of the notifications must be submitted before you are required to comply with the emissions limitations and work practice standards in this subpart.

General Standards

58. 63.7884 What are the general standards I must meet for each site remediation with affected sources?

(a) For each site remediation with affected sources designated under §63.7882, you must meet the standards specified in §§63.7885 through 63.7953, as applicable to your affected sources, unless your site remediation meets the requirements for an exemption under paragraph (b) of this section.

(b) A site remediation that is completed within 30 consecutive calendar days according to the conditions in paragraphs (b)(1) and (2) of this section is not subject to the standards under paragraph (a) of this section. This exemption cannot be used for a site remediation involving the staged or intermittent cleanup of remediation material whereby the remediation activities at the site are started, stopped, and then re-started in a series of intervals with durations less than 30-days per interval for which the total time of all of the intervals required to complete the site remediation exceeds a total of 30 days.

(1) The 30-day period for a site remediation is determined from the first day that any action is initiated that removes, destroys, degrades, transforms, immobilizes, or otherwise manages the remediation materials. The end of a site remediation is determined by the last day on which treatment or disposal of the remediation materials from the cleanup is completed. The following activities, when completed before beginning this initial action, are not counted as part of the 30-day period: activities to characterize the type and extent of the

contamination by collecting and analyzing samples, activities to obtain permits from Federal, State, or local authorities to conduct the site remediation, activities to schedule workers and necessary equipment, and activities to arrange for contractor or third party assistance in performing the site remediation.

(2) You must prepare and maintain at your facility written documentation describing the exempted site remediation, and listing the initiation and completion dates for the site remediation.

59. 63.7885 What are the general standards I must meet for my affected process vents?

(a) For the process vents that comprise the affected source designated under §63.7882, you must select and meet the requirements under one of the options specified in paragraph (b) of this section.

(b) For each affected process vent, except as exempted under paragraph (c) of this section, you must meet one of the options in paragraphs (b)(1) through (3) of this section.

(1) You control HAP emissions from the affected process vents according to the standards specified in §§63.7890 through 63.7893.

(2) You determine for the remediation material treated or managed by the process vented through the affected process vents that the average total volatile organic hazardous air pollutant (VOHAP) concentration, as defined in §63.7957, of this material is less than 10 parts per million by weight (ppmw). Determination of the VOHAP concentration is made using the procedures specified in §63.7943.

(3) If the process vent is also subject to another subpart under 40 CFR part 61 or 40 CFR part 63, you control emissions of the HAP listed in Table 1 of this subpart from the affected process vent in compliance with the standards specified in the applicable subpart. This means you are complying with all applicable emissions limitations and work practice standards under the other subpart (e.g., you install and operate the required air pollution controls or have implemented the required work practice to reduce HAP emissions to levels specified

by the applicable subpart). This provision does not apply to any exemption of the affected source from the emissions limitations and work practice standards allowed by the other applicable subpart.

(c) A process vent that meets the exemption requirements in paragraphs (c)(1) and (2) of this section is exempted from the requirements in paragraph (b) of this section.

(1) The process vent stream exiting the process vent meets the conditions in either paragraph (c)(1)(i) or (ii) of this section.

(i) The process vent stream flow rate is less than 0.005 cubic meters per minute (m^3/min) at standard conditions (as defined in 40 CFR 63.2); or

(ii) The process vent stream flow rate is less than 6.0 m^3/min at standard conditions (as defined in 40 CFR 63.2) and the total concentration of HAP listed in Table 1 of this subpart is less than 20 parts per million by volume (ppmv).

(2) You must demonstrate that the process vent stream meets the applicable exemption conditions in paragraph (c)(1) of this section using the procedures specified in §63.694(m). You must prepare and maintain documentation at your facility to support your determination of the process vent stream flow rate. This documentation must include identification of each process vent exempted under this paragraph and the test results used to determine the process vent stream flow rate and total HAP concentration, as applicable to the exemption conditions for your process vent. You must perform a new determination of the process vent stream flow rate and total HAP concentration, as applicable to the exemption conditions for your process vent, whenever changes to operation of the unit on which the process vent is used could cause the process vent stream conditions to exceed the maximum limits of the exemption.

60. <u>63.7886 What are the general standards I must meet for my affected remediation material management units?</u>

(a) For each remediation material management unit that is part of an affected source designated by §63.7882, you must select and meet the requirements under one of the options specified in paragraph (b) of this section except for those remediation material management units exempted under paragraph (c) or (d) of this section.

(b) For each affected remediation material management unit, you must meet one of the options in paragraphs (b)(1) through (4) of this section.

(1) You control HAP emissions from the affected remediation material management unit according to the standards specified in paragraphs (b)(1)(i) through (v) of this section, as applicable to the unit.

(i) If the remediation material management unit is a tank, then you control HAP emissions according to the standards specified in §§63.7895 through 63.7898.

(ii) If the remediation material management unit is a container, then you control HAP emissions according to the standards specified in §§63.7900 through 63.7903.

(iii) If the remediation material management unit is a surface impoundment, then you control HAP emissions according to the standards specified in §§63.7905 through 63.7908.

(iv) If the remediation material management unit is a oil-water or organic-water separator, then you control HAP emissions according to the standards specified in §§63.7910 through 63.7913.

(v) If the remediation material management unit is a transfer system, then you control HAP emissions according to the standards specified in §§63.7915 through 63.7918.

(2) You determine for the remediation material placed in the remediation material management unit that the average total VOHAP concentration, as defined in §63.7957, of this material is less than 500 ppmw. Determination of the total VOHAP concentration is made based on the remediation material composition at the point-of-extraction, as defined in §63.7957, using the procedures specified in §63.7943.

(3) If the remediation material management unit is also subject to another subpart under 40 CFR part 61 or 40 CFR part 63, you control emissions of the HAP listed in Table 1 of this subpart from the affected remediation material management unit in compliance with the standards specified in the applicable subpart. This means you are complying with all applicable emissions limitations and work practice standards under the other subpart (e.g., you install and operate the required air pollution controls or have implemented the required work practice to reduce HAP emissions to levels specified by the applicable subpart). This provision does not apply to any exemption of the affected source from the emissions limitations and work practice standards allowed by the other applicable subpart.

(4) If the remediation material management unit is an open tank or surface impoundment used for a biological treatment process, you meet the requirements as specified in paragraphs (b)(4)(i) and (ii) of this section.

(i) You demonstrate that the biological treatment process conducted in the open tank or surface impoundment meets the performance levels specified in either §63.684(b)(4)(i) or (ii).

(ii) You monitor the biological treatment process conducted in the open tank or surface impoundment according to the requirements in §63.684(e)(4).

(c) A remediation material management unit is exempted from the requirements in paragraph (b) of this section if this unit is used for cleanup of radioactive mixed waste, as defined in §63.7957, that is subject to applicable regulations, directives, and other requirements under the Atomic Energy Act, the Nuclear Waste Policy Act, or the Waste Isolation Pilot Plant Land Withdrawal Act.

(d) One or a combination of remediation material management units may be exempted at your discretion from the requirements in paragraph (b) of this section provided that the total annual quantity of HAP listed in Table 1 of this subpart contained in the remediation material placed in all of the remediation material

management units exempted under this paragraph is less than 1 Mg/yr. For each remediation material management unit you select to be exempted under this provision, you must meet the requirements in paragraphs (d)(1) and (2) of this section.

(1) You must designate each of the remediation material management units you are selecting to be exempted under this paragraph by either submitting to the Administrator a written notification identifying the exempt units or permanently marking the exempt units at the faculty site. If you choose to prepare and submit a written notification, this notification must include a site plan, process diagram, or other appropriate documentation identifying each of the exempt units. If you choose to permanently mark the exempt units, each exempt unit must be marked in such a manner that it can be readily identified as an exempt unit from the other remediation material management units located at the site.

(2) You must prepare an initial determination of the total annual HAP quantity in the remediation material placed in the units exempted under this paragraph. This determination is based on the total quantity of the HAP listed in Table 1 of this subpart as determined at the point where the remediation material is placed in each exempted unit. You must perform a new determination whenever the extent of changes to the quantity or composition of the remediation material placed in the exempted units could cause the total annual HAP content in the remediation material to exceed 1 Mg/yr. You must maintain documentation to support the most recent determination of the total annual HAP quantity. This documentation must include the basis and data used for determining the organic HAP content of the remediation material.

61. <u>63.7887 What are the general standards I must meet for my affected equipment leak sources?</u>

You must control HAP emissions from equipment leaks from each equipment component that is part of the affected source specified in §63.7882 by implementing leak detection and control measures according to the standards specified in §§63.7920 through 63.7922.

62. 63.7888 How do I implement this rule at my facility using the cross-referenced requirements in other subparts?

(a) For the purposes of this subpart, when you read the term "HAP listed in Table 1 of this subpart" in a cross-referenced section under 40 CFR part 63, subpart DD--National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations, you should refer to Table 1 of this subpart.

(b) For the purposes of this subpart, when you read the term off-site material in a cross-referenced section under 40 CFR part 63, subpart DD--National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations you should substitute the term remediation material, as defined in §63.7957.

(c) For the purposes of this subpart, when you read the term regulated material in a cross-referenced section under 40 CFR part 63, subparts OO, PP, QQ, RR, TT, UU, WW, and VV you should substitute the term remediation material, as defined in §63.7957.

Process Vents

63. 63.7890 What emissions limitations and work practice standards must I meet for process vents?

(a) You must control HAP emissions from each new and existing process vent subject to §63.7885(b)(1) according to emissions limitations and work practice standards in this section that apply to your affected process vents.

(b) For your affected process vents, you must meet one of the facility-wide emission limit options specified in paragraphs (b)(1) through (4) of this section. If you have multiple affected process vent streams, you may comply with this paragraph using a combination of controlled and uncontrolled process vent streams that achieve the facility-wide emission limit that applies to you.

(1) Reduce from all affected process vents the total emissions of the HAP listed in Table 1 of this subpart to a level less than 1.4 kilograms per hour (kg/hr) and 2.8 Mg/yr (3.0 pounds per hour (lb/hr) and 3.1 tpy); or

(2) Reduce from all affected process vents the emissions of total organic carbon (TOC) (minus methane and ethane) to a level below 1.4 kg/hr and 2.8 Mg/yr (3.0 lb/hr and 3.1 tpy); or

(3) Reduce from all affected process vents the total emissions of the HAP listed in Table 1 of this subpart by 95 percent by weight or more; or

(4) Reduce from all affected process vents the emissions of TOC (minus methane and ethane) by 95 percent by weight or more.

(c) For each closed vent system and control device you use to comply with paragraph (b) of this section, you must meet the operating limit requirements and work practice standards in §63.7925(c) through (j) that apply to your closed vent system and control device.

64. 63.7891 How do I demonstrate initial compliance with the emissions limitations and work practice standards for process vents?

(a) You must demonstrate initial compliance with the emissions limitations and work practice standards in §63.7890(b) applicable to your affected process vents by meeting the requirements in paragraphs (b) through (d) of this section.

(b) You have measured or determined using the procedures for performance tests and design evaluations in §63.7941 that emission levels from all of your affected process vents meet the facility-wide emission limits in §63.7890(b) that apply to you, as follows in paragraphs (b)(1) through (4) of this section.

(1) If you elect to meet §63.7890(b)(1), you demonstrate that the total emissions of the HAP listed in Table 1 of this subpart from all affected process vents at your facility are less than 1.4 kg/hr and 2.8 Mg/yr (3.0 lb/hr and 3.1 tpy).

(2) If you elect to meet §63.7890(b)(2), you demonstrate that emissions of TOC (minus methane and ethane) from all affected process vents at your facility are less than 1.4 kg/hr and 2.8 Mg/yr (3.0 lb/hr and 3.1 tpy).

(3) If you elect to meet §63.7890(b)(3), you demonstrate that the total emissions of the HAP listed in Table 1 of this subpart from all affected process vents are reduced by 95 percent by weight or more.

(4) If you elect to meet §63.7890(b)(4), you demonstrate that the emissions of TOC (minus methane and ethane) from all affected process vents are reduced by 95 percent by weight or more.

(c) For each closed vent system and control device you use to comply with §63.7890(b), you have met each requirement for demonstrating initial compliance with the emission limitations and work practice standards for a closed vent system and control device in §63.7926.

(d) You have submitted a notification of compliance status according to the requirements in §63.7950.

65. 63.7892 What are my inspection and monitoring requirements for process vents?

For each closed vent system and control device you use to comply with §63.7890(b), you must monitor and inspect the closed vent system and control device according to the requirements in §63.7927 that apply to you.

66. 63.7893 How do I demonstrate continuous compliance with the emissions limitations and work practice standards for process vents?

(a) You must demonstrate continuous compliance with the emissions limitations and work practice standards in §63.7890 applicable to your affected process vents by meeting the requirements in paragraphs (b) through (d) of this section.

(b) You must maintain emission levels from all of your affected process vents to meet the facility-wide emission limits in §63.7890(b) that apply to you, as specified in the following paragraph (b)(1) through (4) of this section.

(1) If you elect to meet §63.7890(b)(1), you maintain the total emissions of the HAP listed in Table 1 of this subpart from all affected process vents at your facility are less than 1.4 kg/hr and 2.8 Mg/yr (3.0 lb/hr and 3.1 tpy).

(2) If you elect to meet §63.7890(b)(2), you maintain emissions of TOC (minus methane and ethane) from all affected process vents at your facility are less than 1.4 kg/hr and 2.8 Mg/yr (3.0 lb/hr and 3.1 tpy).

(3) If you elect to meet §63.7890(b)(3), you maintain the total emissions of the HAP listed in Table 1 of this subpart from all affected process vents are reduced by 95 percent by weight or more.

(4) If you elect to meet §63.7890(b)(4), you maintain that the emissions of TOC (minus methane and ethane) from all affected process vents are reduced by 95 percent by weight or more.

(c) For each closed vent system and control device you use to comply with §63.7890(b), you have met each requirement for demonstrating continuous compliance with the emission limitations and work practice standards for a closed vent system and control device in §63.7928.

(d) Keeping records to document continuous compliance with the requirements of this subpart according to the requirements in §63.7952.

Tanks

67. 63.7895 What emissions limitations and work practice standards must I meet for tanks?

(a) You must control HAP emissions from each new and existing tank subject to §63.7886(b)(1)(i) according to emissions limitations and work practice standards in this section that apply to your affected tanks.

(b) For each affected tank, you must install and operate air pollution controls that meet the requirements in paragraphs (b)(1) through (4) of this section that apply to your tank.

(1) Unless your tank is used for a waste stabilization process, as defined in §63.7957, you must determine the maximum HAP vapor pressure (expressed in kilopascals (kPa)) of the remediation material placed in your tank using the procedures specified in §63.7944.

(2) If the maximum HAP vapor pressure of the remediation material you place in your tank is less than 76.6 kPa, then you must determine which tank level controls (i.e., Tank Level 1 or Tank Level 2) apply to your tank as shown in Table 2 of this subpart, and based on your tank's design capacity (expressed in cubic meters (m^3)) and the maximum HAP vapor pressure of the remediation material you place in this tank. If your tank is required by Table 2 of this subpart to use Tank Level 1 controls, then you must meet the requirements in paragraph (c) of this section. If your tank is required by Table 2 of this subpart to use Tank Level 2 controls, then you must meet the requirements in paragraph (d) of this section

(3) If maximum HAP vapor pressure of the remediation material you place in your tank is 76.6 kPa or greater, then the tank must use one of the Tank Level 2 controls specified in paragraphs (d)(3) through (5) of this section. Use of floating roofs under paragraph (d)(1) or (2) of this section is not allowed for tanks managing these remediation materials.

(4) A tank used for a waste stabilization process, as defined in §63.7957, must use one of Tank Level 2 controls, as specified in paragraph (d) of this section, that is appropriate for your waste stabilization process.

(c) If you use Tank Level 1 controls, you must install and operate a fixed roof according to the requirements in §63.902. As an alternative to using this fixed roof, you may choose to use one of Tank Level 2 controls in paragraph (d) of this section.

(d) If you use Tank Level 2 controls, you must meet the requirements of one of the options in paragraphs (d)(1) through (5) of this section.

(1) Install and operate a fixed roof with an internal floating roof according to the requirements in §63.1063(a)(1)(i), (a)(2), and (b); or

(2) Install and operate an external floating roof according to the requirements in §63.1063(a)(1)(ii), (a)(2), and (b); or

(3) Install and operate a fixed roof vented through a closed vent system to a control device according to the requirements in §63.685(g). You must meet the emissions limitations and work practice standards in §63.7925 that apply to your closed vent system and control device; or

(4) Install and operate a pressure tank according to the requirements in §63.685(h); or

(5) Locate the tank inside a permanent total enclosure and vent emissions from the enclosure through a closed vent system to a control device that is an enclosed combustion device according to the requirements in §63.685(i). You must meet the emissions limitations and work practice standards in §63.7925 that apply to your closed vent system and control device.

(e) As provided in §63.6(g), you may request approval from the EPA to use an alternative to the work practice standards in this section that apply to your tanks. If you request for permission to use an alternative to the work practice standards, you must submit the information described in §63.6(g)(2).

68. 63.7896 How do I demonstrate initial compliance with the emissions limitations and work practice standards for tanks?

(a) You must demonstrate initial compliance with the emissions limitations and work practice standards in §63.7895 that apply to your affected tanks by meeting the requirements in paragraphs (b) through (h) of this section, as applicable to your containers.

(b) You have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (b)(1) and (2) of this section.

(1) You have determined the applicable tank control levels specified in §63.7895(b) for the tanks to be used for your site remediation.

(2) You have determined, according to the procedures §63.7944, and recorded the maximum HAP vapor pressure of the remediation material placed in each affected tank subject to $63.7886(b)(1)(i) that does not used Tank Level 2 controls.

(c) You must demonstrate initial compliance of each tank determined under paragraph (b) of this section to require Tank Level 1 controls if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (c)(1) through (3) of this section.

(1) Each tank using Tank Level 1 controls is equipped with a fixed roof and closure devices according to the requirements in §63.902(b) and (c) and you have records documenting the design.

(2) You have performed an initial visual inspection of the fixed roof and closure devices for defects according to the requirements in §63.906(a) and you have records documenting the inspection results.

(3) You will operate the fixed roof and closure devices according to the requirements in §63.902.

(d) You must demonstrate initial compliance of each tank determined under paragraph (b) of this section to require Tank Level 2 controls and using a fixed roof with an internal floating roof according to

§63.7895(d)(1) if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (d)(1) through (3) of this section.

(1) Each tank is equipped with an internal floating roof that meets the requirements in §63.1063(a) and you have records documenting the design.

(2) You will operate the internal floating roof according to the requirements in §63.1063(b).

(3) You have performed an initial visual inspection according to the requirements in §63.1063(d)(1) and you have a record of the inspection results.

(e) You must demonstrate initial compliance of each tank determined under paragraph (b) of this section to require Tank Level 2 controls and using an external floating roof according to §63.7895(d)(2) if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (e)(1) through (3) of this section.

(1) Each tank is equipped with an external floating roof that meets the requirements in §63.1063(a) and you have records documenting the design.

(2) You will operate the external floating roof according to the requirements in §63.1063(b).

(3) You have performed an initial seal gap measurement inspection according to the requirements in §63.1063(d)(3) and you have records of the measurement results.

(f) You must demonstrate initial compliance of each tank determined under paragraph (b) of this section to require Tank Level 2 controls and using a fixed roof vented to a control device according to §63.7895(d)(3) if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (f)(1) through (4) of this section.

(1) Each tank is equipped with a fixed roof and closure devices according to the requirements in §63.902(b) and (c) and you have records documenting the design.

(2) You have performed an initial visual inspection of fixed roof and closure devices for defects according to the requirements in §63.695(b)(3) and you have records documenting the inspection results.

(3) You will operate the fixed roof and closure devices according to the requirements in §63.685(g).

(4) You have met each applicable requirement for demonstrating initial compliance with the emission limitations and work practice standards for a closed vent system and control device in §63.7926.

(g) You must demonstrate initial compliance of each tank determined under paragraph (b) of this section to require Tank Level 2 controls and operates as a pressure tank according to §63.7895(d)(4) if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (g)(1) and (2) of this section.

(1) Each tank is designed to operate as a pressure tank according to the requirements in §63.685(h), and you have records documenting the design.

(2) You will operate the pressure tank and according to the requirements in §63.685(h).

(h) You must demonstrate initial compliance of each tank determined under paragraph (b) of this section to require Tank Level 2 controls and using a permanent total enclosure vented to an enclosed combustion device according to §63.7895(d)(5) if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (h)(1) and (2) of this section.

(1) You have submitted as part of your notification of compliance status a signed statement that you have performed the verification procedure according to the requirements in §63.685(i), and you have records of the supporting calculations and measurements.

(2) You have met each applicable requirement for demonstrating initial compliance with the emission limitations and work practice standards for a closed vent system and control device in §63.7926.

69. 63.7897 What are my inspection and monitoring requirements for tanks?

(a) You must visually inspect each of your tanks using Tank Level 1 controls for defects at least annually according to the requirements in §63.906(a).

(b) You must inspect and monitor each of your tanks using Tank Level 2 controls according to the requirements in paragraphs (b)(1) through (5), as applicable to your tanks.

(1) If you use a fixed roof with an internal floating roof according to §63.7895(d)(1), you must visually inspect the fixed roof and internal floating roof according to the requirements in §63.1063(d)(1) and (2).

(2) If you use an external floating roof according to §63.7895(d)(2), you must visually inspect the external floating roof according to the requirements in §63.1063(d)(1) and inspect the seals according the requirements in §63.1063(d)(2) and (3).

(3) If you use a fixed roof vented to a control device according to §63.7895(d)(3), you must meet requirements in paragraphs (b)(3)(i) and (ii) of this section.

(i) You must visually inspect the fixed roof and closure devices for defects according to the requirements in §63.695(b)(3).

(ii) You must monitor and inspect the closed vent system and control device according to the requirements in §63.7927 that apply to you.

(4) If you use a pressure tank according to §63.7895(d)(4), you must visually inspect the tank and its closure devices for defects at least annually to ensure they are operating according to the design requirements in §63.685(h).

(5) If you use a permanent total enclosure vented to an enclosed combustion device according to §63.7895(d)(5), you must meet requirements in paragraphs (b)(5)(i) and (ii) of this section.

(i) You must perform the verification procedure for the permanent total enclosure at least annually according to the requirements in §63.685(i).

(ii) You must monitor and inspect the closed vent system and control device according to the requirements in §63.7927 that apply to you.

70. 63.7898 How do I demonstrate continuous compliance with the emissions limitations and work practice standards for tanks?

(a) You must demonstrate continuous compliance with the emissions limitations and work practice standards in §63.7895 applicable to your affected tanks by meeting the requirements in paragraphs (b) through (d) of this section.

(b) You must demonstrate continuous compliance with the requirement to determine the applicable tank control level specified in §63.7895(b) for each affected tank by meeting the requirements in paragraphs (b)(1) through (3) of this section.

(1) Keeping records of the tank design capacity according to the requirements in §63.1065(a).

(2) For tanks subject to §63.7886(b)(1)(ii) and not using Tank Level 2 controls, meeting the requirements in paragraphs (b)(2)(i) and (ii) of this section.

(i) Keeping records of the maximum HAP vapor pressure determined according to the procedures in §63.7944 for the remediation material placed in each affected tank.

(ii) Performing a new determination of the maximum HAP vapor pressure whenever changes to the remediation material managed in the tank could potentially cause the maximum HAP vapor pressure to increase to a level that is equal to or greater than the maximum HAP vapor pressure for the tank design capacity specified in Table 2. You must keep records of each determination.

(3) Keeping records to document compliance with the requirements of this subpart according to the requirements in §63.7952.

(c) You must demonstrate continuous compliance for each tank determined to require Tank Level 1 controls by meeting the requirements in paragraphs (c)(1) through (5) of this section.

(1) Operating and maintaining the fixed roof and closure devices according to the requirements in §63.902(c).

(2) Visually inspecting the fixed roof and closure devices for defects at least annually according to the requirements in §63.906(a).

(3) Repairing defects according to the requirements in §63.63.906(b).

(4) Recording the information specified in §63.907(a)(3) and (b).

(5) Keeping records to document compliance with the requirements of this subpart according to the requirements in §63.7952.

(d) You must demonstrate continuous compliance for each tank determined to require Tank Level 2 controls and using a fixed roof with an internal floating roof according to §63.7895(d)(1) by meeting the requirements in paragraphs (d)(1) through (5) of this section.

(1) Operating and maintaining the internal floating roof according to the requirements in §63.1063(b).

(2) Visually inspecting the internal floating roof according to the requirements in §63.1063(d)(1) and (2).

(3) Repairing defects according to the requirements in §63.1063(e).

(4) Recording the information specified in §63.1065(b) through (d).

(5) Keeping records to document compliance with the requirements of this subpart according to the requirements in §63.7952.

(e) You must demonstrate continuous compliance for each tank determined to require Tank Level 2 controls and using an external floating roof according to §63.7895(d)(2) by meeting the requirements in paragraphs (e)(1) through (5) of this section.

(1) Operating and maintaining the external floating roof according to the requirements in §63.1063(b).

(2) Visually inspecting the external floating roof according to the requirements in §63.1063(d)(1) and inspecting the seals according the requirements in §63.1063(d)(2) and (3).

(3) Repairing defects according to the requirements in §63.1063(e).

(4) Recording the information specified in §63.1065(b) through (d).

(5) Keeping records to document compliance with the requirements of this subpart according to the requirements in §63.7952.

(f) You must demonstrate continuous compliance for each tank determined to require Tank Level 2 controls and using a fixed roof vented to a control device according to §63.7895(d)(3) by meeting the requirements in paragraphs (f)(1) through (6) of this section.

(1) Operating and maintaining the fixed roof and closure devices according to the requirements in §63.685(g).

(2) Visually inspecting the fixed roof and closure devices for defects at least annually according to the requirements in §63.695(b)(3)(i).

(3) Repairing defects according to the requirements in §63.695(b)(4).

(4) Recording the information specified in §63.696(e).

(5) Meeting each applicable requirement for demonstrating continuous compliance with the emission limitations and work practice standards for a closed vent system and control device in §63.7928.

(6) Keeping records to document compliance with the requirements of this subpart according to the requirements in §63.7952.

(g) You must demonstrate continuous compliance for each tank determined to require Tank Level 2 controls and operated as a pressure tank according to §63.7895(d)(4) by meeting the requirements in paragraphs (g)(1) through (3) of this section.

(1) Operating and maintaining the pressure tank and closure devices according to the requirements in §63.685(h).

(2) Visually inspecting each pressurized tank and closure devices for defects at least annually to ensure they are operating according to the design requirements in §63.685(h), and recording the results of each inspection.

(3) Keeping records to document compliance with the requirements of this subpart according to the requirements in §63.7952.

(h) You must demonstrate continuous compliance for each tank determined to require Tank Level 2 controls and using a permanent total enclosure vented to an enclosed combustion device according to §63.7895(d)(5) by meeting the requirements in paragraphs (h)(1) through (4) of this section.

(1) Performing the verification procedure for the enclosure annually according to the requirements in §63.685(i).

(2) Recording the information specified in §63.696(f).

(3) Meeting each applicable requirement for demonstrating continuous compliance with the emissions limitations and work practice standards for a closed vent system and control device in §63.7928.

(4) Keeping records to document compliance with the requirements of this subpart according to the requirements in §63.7952.

Containers

71. 63.7900 What emissions limitations and work practice standards must I meet for containers?

(a) You must control HAP emissions from each new and existing container subject to §63.7886(b)(1)(ii) according to emissions limitations and work practice standards in this section that apply to your affected containers.

(b) For each container having a design capacity greater than 0.1 m^3 you must meet the requirements in paragraph (b)(1) or (2) of this section that apply to your container except at the times the container is used for treatment of remediation material by a waste stabilization process, as defined in § 63.7957. As an alternative for any container subject to this paragraph, you may choose to meet the requirements in paragraph (d) of this section.

(1) If the design capacity of your container is less than or equal to 0.46 m^3, then you must use controls according to the standards for Container Level 1 controls as specified in §63.922. As an alternative, you may choose to use controls according to either the standards for Container Level 2 controls as specified in §63.923.

(2) If the design capacity of your container is greater than 0.46 m^3, then you must use controls according to the standards for Container Level 2 controls as specified in §63.923 except as provided for in paragraphs (3) and (4) of this section.

(3) As an alternative to meeting the standards in paragraph (2) of this section for containers with a capacity greater than 0.46 m^3, if you determine that either of the conditions in paragraphs (b)(3)(i) or (ii) apply to the remediation material placed in your container, then you may use controls according to the standards for Container Level 1 controls as specified in §63.922.

(i) Vapor pressure of every organic constituent in the remediation material placed in your container is less than 0.3 kPa at 20°C; or

(ii) Total concentration of the pure organic constituents having a vapor pressure greater than 0.3 kPa at 20°C in the remediation material placed in your container is less than 20 percent by weight.

(c) At times when a container having a design capacity greater than 0.1 m^3 is used for treatment of an remediation material by a waste stabilization process as defined in § 63.7957, you must control air emissions from the container during the process whenever the remediation material in the container is exposed to the atmosphere according to the standards for Container Level 3 controls as specified in §63.924. You must meet the emissions limitations and work practice standards in §63.7925 that apply to your closed vent system and control device.

(d) As an alternative to meeting the requirements in paragraph (b) of this section, you may choose to use controls on your container according to the standards for Container Level 3 controls as specified in §63.924. You must meet the emissions limitations and work practice standards in §63.7925 that apply to your closed vent system and control device.

(e) As provided in §63.6(g), you may request approval from the EPA to use an alternative to the work practice standards in this section that apply to your containers. If you request for permission to use an alternative to the work practice standards, you must submit the information described in §63.6(g)(2).

72. 63.7901 How do I demonstrate initial compliance with the emissions limitations and work practice standards for containers?

(a) You must demonstrate initial compliance with the emissions limitations and work practice standards in §63.7990 that apply to your affected containers by meeting the requirements in paragraphs (b) through (e) of this section, as applicable to your containers.

(b) You have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (b)(1) and (2) of this section.

(1) You have determined the applicable container control levels specified in §63.7990 for the containers to be used for your site remediation.

(2) You have determined and recorded the maximum vapor pressure or total organic concentration for the remediation material placed in containers with a design capacity greater than 0.46 m^3, and do not used Container Level 2 or Level 3 controls.

(c) You must demonstrate initial compliance of each container determined under paragraph (b) of this section to require Container Level 1 controls if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (c)(1) and (2) of this section.

(1) Each container using Container Level 1 controls will be one of the containers specified in §63.922(b).

(2) You will operate each container cover and closure device according to the requirements in §63.922(d).

(d) You must demonstrate initial compliance of each container determined under paragraph (b) of this section to require Container Level 2 controls if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (d)(1) through (4) of this section.

(1) Each container using Container Level 2 controls will be one of the containers specified in §63.923(b).

(2) You will transfer remediation materials into and out of each container according to the procedures in §63.923(d).

(3) You will operate and maintain the container covers and closure devices according to the requirements in §63.923(d).

(4) You have records that the container meets the applicable U.S. Department of Transportation regulations, or you have conducted an initial test of each container for no detectable organic emissions using the procedures in §63.925(a), and have records documenting the test results, or you have demonstrated within the last 12 months that each container is vapor-tight according to the procedures in §63.925(a) and have records documenting the test results.

(e) You must demonstrate initial compliance of each container determined under paragraph (b) of this section to require Container Level 3 controls if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (e)(1) and (2) of this section.

(1) For each permanent total enclosure you use to comply with §63.7900, you have performed the verification procedure according to the requirements in §63.924(c)(1), and prepare records of the supporting calculations and measurements.

(2) You have met each applicable requirement for demonstrating initial compliance with the emission limitations and work practice standards for a closed vent system and control device in §63.7926.

73. 63.7902 What are my inspection and monitoring requirements for containers?

(a) You must inspect each container using Container Level 1 or Container Level 2 controls according to the requirements in §63.926(a).

(b) If you use Container Level 3 controls, you must meet requirements in paragraphs (b)(1) and (2) of this section, as applicable to your site remediation.

(1) You must perform the verification procedure for each permanent total enclosure annually according to the requirements in §63.924(c)(1).

(2) You must monitor and inspect each closed vent system and control device according to the requirements in §63.7927 that apply to you.

74. 63.7903 How do I demonstrate continuous compliance with the emissions limitations and work practice standards for containers?

(a) You must demonstrate continuous compliance with the emissions limitations and work practice standards in §63.7990 applicable to your affected containers by meeting the requirements in paragraphs (b) through (e) of this section.

(b) You must demonstrate continuous compliance with the requirement to determine the applicable container control level specified in §63.7990(b) for each affected tank by meeting the requirements in paragraphs (b)(1) through (3) of this section.

(1) Keeping records of the quantity and design capacity for each type of container used for your site remediation and subject to §63.7886(b)(1)(ii).

(2) For containers subject to §63.7886(b)(1)(ii) with a design capacity greater than 0.46 m^3 and not using Container Level 2 or Container Level 3 controls, meeting the requirements in paragraphs (b)(2)(i) and (ii) of this section.

(i) Keeping records of the maximum vapor pressure or total organic concentration for the remediation material placed in the containers, as applicable to the conditions in §63.7900(b)(3)(i) or (ii) for which your containers qualify to use Container Level 1 controls.

(ii) Performing a new determination whenever changes to the remediation material placed in the containers could potentially cause the maximum vapor pressure or total organic concentration to increase to a

level that is equal to or greater than the conditions specified in §63.7900(b)(3)(i) or (ii), as applicable to your containers. You must keep records of each determination.

(3) Keeping records to document compliance with the requirements according to the requirements in §63.7952.

(c) You must demonstrate continuous compliance for each container determined to require Container Level 1 controls by meeting the requirements in paragraphs (c)(1) through (5) of this section.

(1) Operating and maintaining covers for each container according to the requirements in §63.922(d) .

(2) Inspecting each container annually according to the requirements in §63.926(a)(2).

(3) Emptying or repairing each container according to the requirements in §63.926(a)(3).

(4) Keeping records of an inspection that includes the information in paragraphs (a)(4)(i) and (ii) of this section.

(i) Date of each inspection; and

(ii) If a defect is detected during and inspection, the location of the defect, a description of the defect, the date of detection, the corrective action taken to repair the defect, and if repair is delayed, the reason for any delay and the date completion of the repair is expected.

(5) Keeping records to document compliance with the requirements according to the requirements in §63.7952.

(d) You must demonstrate continuous compliance for each container determined to require Container Level 2 controls by meeting the requirements in paragraphs (d)(1) through (6) of this section.

(1) Transferring remediation material in and out of the container according to the requirements in §63.923(c).

(2) Operating and maintaining container covers according to the requirements in §63.923(d).

(3) Inspecting each container annually according to the requirements in §63.926(a)(2).

(4) Emptying or repairing containers according to the requirements in §63.926(a)(3).

(5) Keeping records of each inspection that include the information in paragraphs (d)(5)(i) and (ii) of this section.

(i) Date of each inspection; and

(ii) If a defect is detected during and inspection, the location of the defect, a description of the defect, the date of detection, the corrective action taken to repair the defect, and if repair is delayed, the reason for any delay and the date completion of the repair is expected.

(6) Keeping records to document compliance with the requirements of this subpart according to the requirements in §63.7952.

(e) You must demonstrate continuous compliance for each container determined to require Container Level 3 controls by meeting the requirements in paragraphs (e)(1) through (4) of this section.

(1) Performing the verification procedure for the enclosure annually according to the requirements in §63.685(i).

(2) Recording the information specified in §63.696(f).

(3) Meeting each applicable requirement for demonstrating continuous compliance with the emissions limitations and work practice standards for a closed vent system and control device in §63.7928.

(4) Keeping records to document compliance with the requirements of this subpart according to the requirements in §63.7952.

Surface Impoundments

75. 63.7905 What emissions limitations or work practice standards must I meet for surface impoundments?

(a) You must control HAP emissions from each new and existing surface impoundment subject to §63.7886(b)(1)(iii) according to emissions limitations and work practice standards in this section that apply to your affected surface impoundments.

(b) For each affected surface impoundment, you must install and operate air pollution controls that meet either of the options in paragraphs (b)(1) or (2) of this section.

(1) Install and operate a floating membrane cover according to the requirements in §63.942; or

(2) Install and operate a cover vented through a closed vent system to a control device according to the requirements in §63.943. You must meet the emissions limitations and work practice standards in §63.7925 that apply to your closed vent system and control device.

(c) As provided in §63.6(g), you may request approval from the EPA to use an alternative to the work practice standards in this section that apply to your surface impoundments. If you request for permission to use an alternative to the work practice standards, you must submit the information described in §63.6(g)(2).

76. 63.7906 How do I demonstrate initial compliance with the emissions limitations or work practice standards for surface impoundments?

(a) You must demonstrate initial compliance with the emissions limitations and work practice standards in §63.7905 that apply to your affected surface impoundments by meeting the requirements in paragraphs (b) and (c) of this section, as applicable to your surface impoundments.

(b) You must demonstrate initial compliance of each surface impoundment using a floating membrane cover according to §63.7905(b)(1) if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (b)(1) through (3) of this section.

(1) You have installed a floating membrane cover and closure devices that meet the requirements in §63.942(b), and you have records documenting the design and installation.

(2) You will operate the cover and closure devices according to the requirements in §63.942(c).

(3) You have performed an initial visual inspection of each surface impoundment and closure devices according to the requirements in §63.946(a), and you have records documenting the inspection results.

(c) You must demonstrate initial compliance of each surface impoundment using a cover vented to a control device according to §63.7905(b)(2) if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (c)(1) through (4) of this section.

(1) You have installed a cover and closure devices that meet the requirements in §63.943(b), and have records documenting the design and installation.

(2) You will operate the cover and closure devices according to the requirements in §63.943(c).

(3) You have performed an initial visual inspection of each cover and closure devices according to the requirements in §63.946(b), and have records documenting the inspection results.

(4) You have met each applicable requirement for demonstrating initial compliance with the emission limitations and work practice standards for a closed vent system and control device in §63.7926.

77. 63.7907 What are my inspection and monitoring requirements for surface impoundments?

(a) If you use a floating membrane cover according to §63.7905(b)(1), you must visually inspect the floating membrane cover and its closure devices at least annually according to the requirements in §63.946(a).

(b) If you use a cover vented to a control device according to §63.7905(b)(2), you must meet requirements in paragraphs (b)(1) and (2) of this section.

(1) You must visually inspect the cover and its closure devices for defects according to the requirements in §63.946(b).

(2) You must monitor and inspect the closed vent system and control device according to the requirements in §63.7927 that apply to you.

78. 63.7908 How do I demonstrate continuous compliance with the emissions limitations and work practice standards for surface impoundments?

(a) You must demonstrate continuous compliance with the emissions limitations and work practice standards in §63.7905 applicable to your affected surface impoundments by meeting the requirements in paragraphs (b) and (c) of this section as applicable to your surface impoundments.

(b) You must demonstrate continuous compliance for each surface impoundment using a floating membrane cover according to §63.7905(b)(1) by meeting the requirements in paragraphs (b)(1) through (5) of this section.

(1) Operating and maintaining the floating membrane cover and closure devices according to the requirements in §63.942(c).

(2) Visually inspecting the floating membrane cover and closure devices for defects at least annually according to the requirements in §63.946(a).

(3) Repairing defects according to the requirements in §63.946(c).

(4) Recording the information specified in §63.947(a)(2) and (a)(3).

(5) Keeping records to document compliance with the requirements according to the requirements in §63.7952.

(c) You must demonstrate continuous compliance for each surface impoundment using a cover vented to a control device according to §63.7905(b)(2) by meeting the requirements in paragraphs (c)(1) through (6) of this section.

(1) Operating and maintaining the cover and its closure devices according to the requirements in §63.943(c).

(2) Visually inspecting the cover and its closure devices for defects at least annually according to the requirements in §63.946(b).

(3) Repairing defects according to the requirements in §63.946(c).

(4) Recording the information specified in §63.947(a)(2) and (a)(3).

(5) Meeting each applicable requirement for demonstrating continuous compliance with the emission limitations and work practice standards for a closed vent system and control device in §63.7928.

(6) Keeping records to document compliance with the requirements according to the requirements in §63.7952.

Separators

79. 63.7910 What emissions limitations and work practice standards must I meet for separators?

(a) You must control HAP emissions from each new and existing oil-water separator and organic-water separator subject to §63.7886(b)(1)(iv) according to emissions limitations and work practice standards in this section that apply to your affected separators.

(b) For each affected separator, you must install and operate air pollution controls that meet one of the options in paragraphs (b)(1) through (3) of this section.

(1) Install and operate a floating roof according to the requirements in §63.1043. For portions of the separator where it is infeasible to install and operate a floating roof, such as over a weir mechanism, you must comply with the requirements specified in paragraph (b)(2) of this section.

(2) Install and operate a fixed roof vented through a closed vent system to a control device according to the requirements in §63.1044. You must meet the emissions limitations and work practice standards in §63.7925 that apply to your closed vent system and control device.

(3) Install and operate a pressurized separator according to the requirements in §63.1045.

(c) As provided in §63.6(g), you may request approval from the EPA to use an alternative to the work practice standards in this section that apply to your separators. If you request for permission to use an alternative to the work practice standards, you must submit the information described in §63.6(g)(2).

80. 63.7911 How do I demonstrate initial compliance with the emissions limitations and work practice standards for separators?

(a) You must demonstrate initial compliance with the emissions limitations and work practice standards in §63.7910 that apply to your affected separators by meeting the requirements in paragraphs (b) through (d) of this section, as applicable to your separators.

(b) You must demonstrate initial compliance of each separator using a floating roof according to §63.7910(b)(1) if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (b)(1) through (4) of this section.

(1) You have installed a floating roof and closure devices that meet the requirements in §63.1043(b), and you have records documenting the design and installation.

(2) You will operate the floating roof and closure devices according to the requirements in §63.1043(c).

(3) You have performed an initial seal gap measurement inspection using the procedures in §63.1046(b), and you have records documenting the measurement results.

(4) You have performed an initial visual inspection of the floating roof and closure devices for defects according to the requirements in §63.1047(b)(2), and you have records documenting the inspection results.

(5) For any portions of the separator using a fixed roof vented to a control device according to §63.7910(b)(1), you have met the requirements in paragraphs (c)(1) through (4) of this section.

(c) You must demonstrate initial compliance of each separator using a fixed roof vented to a control device according to §63.7910(b)(2) if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (c)(1) through (4) of this section.

(1) You have installed a fixed roof and closure devices that meet the requirements in §63.1042(b), and you have records documenting the design and installation.

(2) You will operate the fixed roof and its closure devices according to the requirements in §63.1042(c).

(3) You have performed an initial visual inspection of the fixed roof and closure devices for defects according to the requirements in §63.1047(a).

(4) You have met each applicable requirement for demonstrating initial compliance with the emission limitations and work practice standards for a closed vent system and control device in §63.7926.

(d) You must demonstrate initial compliance of each pressurized separator that operates as a closed system according to §63.7910(b)(3) if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (d)(1) and (2) of this section.

(1) You have installed a pressurized separator that operates as a closed system according to the requirements in §63.1045(b)(1) and (b)(2), and you have records of the design and installation.

(2) You will operate the pressurized separator as a closed system according to the requirements in §63.1045(b)(3).

81. 63.7912 What are my inspection and monitoring requirements for separators?

(a) If you use a floating roof according to §63.7910(b)(1), you must meet requirements in paragraphs (a)(1) and (2) of this section.

(1) Measure the seal gaps at least annually according to the requirements in §63.1047(b)(1).

(2) Visually inspect the floating roof at least annually according to the requirements in §63.1047(b)(2).

(b) If you use a cover vented to a control device according to §63.7910(b)(1) or (2), you must meet requirements in paragraphs (b)(1) and (2) of this section.

(1) You must visually inspect the cover and its closure devices for defects according to the requirements in §63.1047(c).

(2) You must monitor and inspect the closed vent system and control device according to the requirements in §63.7927 that apply to you.

(c) If you use a pressurized separator that operates as a closed system according to §63.7910(b)(3), you must visually inspect each pressurized separator and closure devices for defects at least annually to ensure they are operating according to the design requirements in §63.1045(b).

82. 63.7913 How do I demonstrate continuous compliance with the emissions limitations and work practice standards for separators?

(a) You must demonstrate continuous compliance with the emissions limitations and work practice standards in §63.7910 applicable to your affected separators by meeting the requirements in paragraphs (b) through (d) of this section as applicable to your surface impoundments.

(b) You must demonstrate continuous compliance for each separator using a floating roof according to §63.7910(b)(1) by meeting the requirements in paragraphs (b)(1) through (6) of this section.

(1) Operating and maintaining the floating roof according to the requirements in §63.1043(b).

(2) Performing seal gap measurement inspections at least annually according to the requirements in §63.1047(b)(1).

(3) Visually inspecting the floating roof at least annually according to the requirements in §63.1047(b)(2).

(4) Repairing defects according to the requirements in §63.1047(d).

(5) Recording the information specified in §63.1048(a) and (b).

(6) Keeping records to document compliance with the requirements according to the requirements in §63.7952.

(c) You must demonstrate continuous compliance for each separator using a cover vented to a control device according to §63.7905(b)(1) or (2) by meeting the requirements in paragraphs (c)(1) through (6) of this section.

(1) Operating and maintaining the fixed roof and its closure devices according to the requirements in §63.1042.

(2) Performing visual inspections of the fixed roof and its closure devices for defects at least annually according to the requirements in §63.1047(a).

(3) Repairing defects according to the requirements in §63.1047(d).

(4) Recording the information specified in §63.1048(a).

(5) Meeting each applicable requirement for demonstrating continuous compliance with the emission limitations and work practice standards for a closed vent system and control device in §63.7928.

(6) Keeping records to document compliance with the requirements of this subpart according to the requirements in §63.7952.

(d) You must demonstrate continuous compliance for each pressurized separator operated as a closed system according to §63.7910(b)(3) by meeting the requirements in paragraphs (d)(1) and (2) of this section.

(1) Operating the pressurized separator at all times according to the requirements in §63.1045.

(2) Visually inspecting each pressurized tank and closure devices for defects at least annually to ensure they are operating according to the design requirements in §63.1045(b), and recording the results of each inspection.

Transfer Systems

83. 63.7915 What emissions limitations and work practice standards must I meet for transfer systems?

(a) You must control HAP emissions from each new and existing transfer system subject to §63.7886(b)(1)(v) according to emissions limitations and work practice standards in this section that apply to your affected transfer systems.

(b) For each affected transfer system that is an individual drain system as defined in §63.7957, you must install and operate controls according to the requirements in §63.962.

(c) For each affected transfer system that is not an individual drain system as defined in §63.7957, you must use one of the transfer systems specified in paragraphs (c)(1) through (3) of this section.

(1) A transfer system that uses covers according to the requirements in §63.689(d).

(2) A transfer system that consists of continuous hard-piping. All joints or seams between the pipe sections shall be permanently or semi-permanently sealed (e.g., a welded joint between two sections of metal pipe or a bolted and gasketed flange).

(3) A transfer system that is enclosed and vented through a closed vent system to a control device according to the requirements specified in paragraphs (c)(3)(i) and (ii) of this section.

(i) The transfer system is designed and operated such that an internal pressure in the vapor headspace in the enclosure is maintained at a level less than atmospheric pressure when the control device is operating, and

(ii) The closed vent system and control device are designed and operated to meet the emissions limitations and work practice standards in §63.7925 that apply to your closed vent system and control device.

(d) As provided in §63.6(g), you may request approval from the EPA to use an alternative to the work practice standards in this section that apply to your transfer systems. If you request for permission to use an alternative to the work practice standards, you must submit the information described in §63.6(g)(2).

84. 63.7916 How do I demonstrate initial compliance with the emissions limitations and work practice standards for transfer systems?

(a) You must demonstrate initial compliance with the emissions limitations and work practice standards in §63.7915 that apply to your affected transfer systems by meeting the requirements in paragraphs (b) through (e) of this section, as applicable to your transfer systems.

(b) You must demonstrate initial compliance of each individual drain system using controls according to §63.7915(b) if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (b)(1) through (3) of this section.

(1) You have installed air emission controls for each individual drain system and junction box according to the requirements in §63.962(a) and (b), and you have records documenting the installation and design.

(2) You will operate the air emission controls according to the requirements in §63.962(b)(5).

(3) You have performed an initial visual inspection of each individual drain system according to the requirements in §63.964(a), and you have records documenting the inspection results.

(c) You must demonstrate initial compliance of each transfer system using covers according to §63.7915(c)(1) if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (c)(1) through (3) of this section.

(1) Each transfer system is equipped with covers and closure devices according to the requirements in §63.689(d)(1) through (4), and you have records documenting the design and installation.

(2) You have performed an initial inspection of each cover and its closure devices for defects according to the requirements in §63.695(d)(1) through (5), and you have records documenting the inspection results.

(3) You will operate each cover and its closure devices according to the requirements in §63.689(5).

(d) You must demonstrate initial compliance of each transfer system that consists of hard piping according to §63.7915(c)(2) if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (d)(1) and (2) of this section.

(1) You have installed a transfer system that consists entirely of hard piping and meets the requirements in §63.7915(c)(2), and you have records documenting the design and installation.

(2) You have performed an initial inspection of the entire transfer system to verify that all joints or seams between the pipe sections are permanently or semi-permanently sealed (e.g., a welded joint between two sections of metal pipe or a bolted and gasketed flange), and you have records documenting the inspection results.

(e) You must demonstrate initial compliance of each transfer system that is enclosed and vented to a control device according to §63.7915(e)(3) if you have submitted as part of your notification of compliance

status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (e)(1) and (2) of this section.

(1) You have installed a transfer system that is designed and operated such that an internal pressure in the vapor headspace in the enclosure is maintained at a level less than atmospheric pressure when the control device is operating, and you have records documenting the design and installation.

(2) You have met each applicable requirement for demonstrating initial compliance with the emission limitations and work practice standards for a closed vent system and control device in §63.7926.

85. 63.7917 What are my inspection and monitoring requirements for transfer systems?

(a) If you operate an individual drain system as a transfer system according to §63.7915(b), you must visually inspect each individual drain system at least annually according to the requirements in §63.964(a).

(b) If you operate a transfer system using covers according to §63.7915(c)(1), you must inspect each cover and its closure devices for defects according to the requirements in §63.695(d)(1) through (5).

(c) If you operate a transfer system consisting of hard piping according to §63.7915(c)(2), you must annually inspect the entire pipeline and all joints for leaks and other defects. In the event that a defect is detected, you must repair the leak or defect according to the requirements of paragraph (e) of this section.

(d) If you operate a transfer system that is enclosed and vented to a control device according to §63.7915(c)(3), you must meet requirements in paragraphs (d)(1) and (2) of this section.

(1) You must annually inspect all enclosure components (e.g., enclosure sections, closure devices, fans) for defects that would prevent an internal pressure in the vapor headspace in the enclosure from continuously being maintained at a level less than atmospheric pressure when the control device is operating. In the event that a defect is detected, you must repair the defect according to the requirements of paragraph (e) of this section.

(2) You must monitor and inspect the closed vent system and control device according to the requirements in §63.7927 that apply to you.

(e) If you are subject to paragraph (c) or (d) of this section, you must repair all detected defects as specified in paragraphs (e)(1) through (3) of this section.

(1) You must make first efforts at repair of the defect no later than 5 calendar days after detection and repair shall be completed as soon as possible but no later than 45 calendar days after detection except as provided in paragraph (e)(2) of this section.

(2) Repair of a defect may be delayed beyond 45 calendar days if you determine that repair of the defect requires emptying or temporary removal from service of the transfer system and no alternative transfer system is available at the site to accept the material normally handled by the system. In this case, you must repair the defect the next time the process or unit that is generating the material handled by the transfer system stops operation. Repair of the defect must be completed before the process or unit resumes operation.

(3) You must maintain a record of the defect repair according to the requirements specified in §63.7952.

86. <u>63.7918 How do I demonstrate continuous compliance with the emissions limitations and work practice standards for transfer systems?</u>

(a) You must demonstrate continuous compliance with the emissions limitations and work practice standards in §63.7915 applicable to your affected transfer system by meeting the requirements in paragraphs (b) through (e) of this section as applicable to your transfer systems.

(b) You must demonstrate continuous compliance for each individual drain system using controls according to §63.7915(b) by meeting the requirements in paragraphs (b)(1) through (5) of this section.

(1) Operating and maintaining the air emission controls for individual drain systems according to the requirements in §63.962.

(2) Visually inspecting each individual drain system at least annually according to the requirements in §63.964(a).

(3) Repairing defects according to the requirements in §63.964(b).

(4) Recording the information specified in §63.965(a).

(5) Keeping records to document compliance with the requirements of this subpart according to the requirements in §63.7952.

(c) You must demonstrate continuous compliance for each transfer system using covers according to §63.7915(c)(1) by meeting the requirements in paragraphs (c)(1) through (4) of this section.

(1) Operating and maintaining each cover and its closure devices according to the requirements in §63.689(d)(1) through (5).

(2) Performing inspections of each cover and its closure devices for defects at least annually according to the requirements in §63.695(d)(1) through (5).

(3) Repairing defects according to the requirements in §63.695(5)

(4) Keeping records to document compliance with the requirements of this subpart according to the requirements in §63.7952.

(d) You must demonstrate continuous compliance for each transfer system that consists of hard piping according to §63.7915(c)(2) by meeting the requirements in paragraphs (d)(1) through (4) of this section.

(1) Operating and maintaining the pipeline to ensure that all joints or seams between the pipe sections remain permanently or semi-permanently sealed (e.g., a welded joint between two sections of metal pipe or a bolted and gasketed flange).

(2) Inspecting the pipeline for defects at least annually according to the requirements in §63.7918(c).

(3) Repairing defects according to the requirements in §63.7918(e).

(4) Keeping records to document compliance with the requirements of this subpart according to the requirements in §63.7952.

(e) You must demonstrate continuous compliance for each transfer system that is enclosed and vented to a control device according to §63.7915(e)(3) by meeting the requirements in paragraphs (e)(1) through (5) of this section.

(1) Operating and maintaining the enclosure to ensure that the internal pressure in the vapor headspace in the enclosure is maintained continuously at a level less than atmospheric pressure when the control device is operating.

(2) Inspecting the enclosure and its closure devices for defects at least annually according to the requirements in §63.7918(d).

(3) Repairing defects according to the requirements in §63.7918(e).

(4) Meeting each applicable requirement for demonstrating continuous compliance with the emission limitations and work practice standards for a closed vent system and control device in §63.7928.

(5) Keeping records to document compliance with the requirements according to the requirements in §63.7952.

Equipment Leaks

87. 63.7920 What emissions limitations and work practice standards must I meet for equipment leaks?

(a) You must control HAP emissions from each new and existing equipment subject to §63.7887 according to emissions limitations and work practice standards in this section that apply to your affected equipment.

(b) For your affected equipment, you must meet the requirements in either paragraph (b)(1) or (2) of this section.

(1) Control equipment leaks according to all applicable requirements under 40 CFR part 63, subpart TT--National Emission Standards for Equipment Leaks--Control Level 1; or

(2) Control equipment leaks according to all applicable requirements under 40 CFR part 63, subpart UU--National Emission Standards for Equipment Leaks - Control Level 2.

(c) If you use a closed vent system and control device to comply with this section, as an alternative to meeting the standards in §63.1015 or §63.1034 for closed vent systems and control devices, you may elect to meet the requirements in §§63.7925 through 63.7928 that apply to your closed vent system and control device.

(d) As provided in §63.6(g), you may request approval from the EPA to use an alternative to the work practice standards in this section that apply to your equipment. If you request for permission to use an alternative to the work practice standards, you must submit the information described in §63.6(g)(2).

88. 63.7921 How do I demonstrate initial compliance with the emissions limitations and work practice standards for equipment leaks?

(a) You must demonstrate initial compliance with the emissions limitations and work practice standards in §63.7920 that apply to your affected equipment by meeting the requirements in paragraphs (b) and (c) of this section, as applicable to your affected sources.

(b) If you control equipment leaks according to the requirements under §63.7920(b)(1), you must demonstrate initial compliance if you have met the requirements in paragraphs (b)(1) and (2) of this section.

(1) You include the information required in §63.1018(a)(1) in your notification of compliance status report.

(2) You have submitted as part of your notification of compliance status a signed statement that:

(i) You will meet the requirements in §§63.1002 through 63.1016 that apply to your affected equipment.

(ii) You have identified the equipment subject to control according to the requirements in §63.1003, including equipment designated as unsafe to monitor, and have records supporting the determinations with a written plan for monitoring the equipment according to the requirements in §63.1003(c)(4).

(c) If you control equipment leaks according to the requirements under §63.7920(b)(2), You must demonstrate initial compliance if you have met the requirements in paragraphs (c)(1) and (2) of this section.

(1) You have included the information required in §63.1039(a) in your notification of compliance status report.

(2) You have submitted as part of your notification of compliance status a signed statement that:

(i) You will meet the requirements in §§63.1021 through 63.1037 that apply to your affected equipment.

(ii) You have identified the equipment subject to control according to the requirements in §63.1022, including equipment designated as unsafe to monitor, and have records supporting the determinations with a written plan for monitoring the equipment according to the requirements in §63.1022(c)(4).

89. 63.7922 How do I demonstrate continuous compliance with the work practice standards for equipment leaks?

(a) You must demonstrate continuous compliance with the emissions limitations and work practice standards in §63.7920 applicable to your affected equipment by meeting the requirements in paragraphs (b) through (d) of this section that apply to you.

(b) If you control equipment leaks according to the requirements under §63.7920(b)(1), you must demonstrate continuous compliance by inspecting, monitoring, repairing, and maintaining records according to the requirements in §§63.1002 through 63.1018 that apply to your affected equipment.

(c) If you control equipment leaks according to the requirements under §63.7920(b)(2), you must demonstrate continuous compliance by inspecting, monitoring, repairing, and maintaining records according to the requirements in §§63.1021 through 63.1039 that apply to your affected equipment.

(d) You must keep records to demonstrate compliance with the requirements according to the requirements in §63.7952.

Closed Vent Systems and Control Devices

90. 63.7925 What emissions limitations and work practice standards must I meet for closed vent systems and control devices?

(a) For each closed-vent system and control device you use to comply with requirements in §§63.7890 through 63.7922, as applicable to your affected sources, you must meet the emissions limitations and work practice standards in this section.

(b) Whenever gases or vapors containing HAP are vented through the closed-vent system to the control device, the control device must be operating except at those times listed in either paragraph (b)(1) or (2) of this section.

(1) The control device may be bypassed for the purpose of performing planned routine maintenance of the closed-vent system or control device in situations when the routine maintenance cannot be performed during periods that the emission point vented to the control device is shutdown. On an annual basis, the total time that the closed-vent system or control device is bypassed to perform routine maintenance must not exceed 240 hours per each calendar year.

(2) The control device may be bypassed for the purpose of correcting a malfunction of the closed-vent system or control device. You must perform the adjustments or repairs necessary to correct the malfunction as soon as practicable after the malfunction is detected.

(c) For each closed vent system, you must meet the work practice standards in §63.693(c).

(d) For each control device other than a flare or a control device used to comply with the facility-wide process vent emission limits in §63.7890(b), you must control HAP emissions to meet either of the emissions limits in paragraphs (d)(1) or (2) of this section except as provided for in paragraph (f) of this section.

(1) Reduce emissions of total HAP listed in Table 1 of this subpart or TOC (minus methane and ethane) from each control device by 95 percent by weight; or

(2) Limit the concentration of total HAP listed in Table 1 of this subpart or TOC (minus methane and ethane) from each combustion control device (a thermal incinerator, catalytic incinerator, boiler, or process heater) to 20 ppmv or less on a dry basis corrected to 3 percent oxygen.

(e) If you use a flare for your control device, then you must meet the requirements for flares in §63.11(b).

(f) If you use a process heater or boiler for your control device, then as alternative to meeting the emissions limits in paragraph (d) of this section you may choose to comply with one of the work practice standards in paragraphs (f)(1) through (3) of this section.

(1) Introduce the vent stream into the flame zone of the boiler or process heater and maintain the conditions in the combustion chamber at a residence time of 0.5 seconds or longer and at a temperature of 760°C or higher; or

(2) Introduce the vent stream with the fuel that provides the predominate heat input to the boiler or process heater (i.e., the primary fuel); or

(3) Introduce the vent stream to a boiler or process heater for which you either have been issued a final permit under 40 CFR part 270 and complies with the requirements of 40 CFR part 266, subpart H--Hazardous

Waste Burned in Boilers and Industrial Furnaces; or has certified compliance with the interim status requirements of 40 CFR part 266, subpart H.

(g) For each control device other than a flare, you must meet each operating limit in paragraphs (g)(1) through (6) of this section that applies to your control device.

(1) If you use a regenerable carbon adsorption system, you must:

(i) Maintain the hourly average total regeneration stream mass flow during the adsorption bed regeneration cycle greater than or equal to the stream mass flow established in the design evaluation or performance test.

(ii) Maintain the hourly average temperature of the adsorption bed during regeneration (except during the cooling cycle) greater than or equal to the temperature established during the design evaluation or performance test.

(iii) Maintain the hourly average temperature of the adsorption bed after regeneration (and within 15 minutes after completing any cooling cycle) less than or equal to the temperature established during the design evaluation.

(iv) Maintain the frequency of regeneration greater than or equal to the frequency established during the design evaluation.

(2) If you use a nonregenerable carbon adsorption system, you must maintain the hourly average temperature of the adsorption bed less than or equal to the temperature established during the design evaluation or performance test.

(3) If you use a condenser, you must maintain the daily average condenser exit temperature less than or equal to the temperature established during the design evaluation or performance test.

(4) If you use a thermal incinerator, you must maintain the daily average firebox temperature greater than or equal to the temperature established in the design evaluation or during the performance test.

(5) If you use a catalytic incinerator, you must maintain the daily average temperature difference across the catalyst bed greater than or equal to the minimum temperature difference established during the performance test or design evaluation.

(6) If you use a boiler or process heater to comply with an emission limit in paragraph (d) of this section, you must maintain the daily average firebox temperature within the operating level established during the design evaluation or performance test.

(h) If you use a carbon adsorption system as your control, you must meet each work practice standard in paragraphs (h)(1) through (3) of this section that applies to your control device.

(1) If you use a regenerable carbon adsorption system, you must:

(i) Replace the existing adsorbent in each segment of the bed with an adsorbent that meets the replacement specifications established during the design evaluation before the age of the adsorbent exceeds the maximum allowable age established during the design evaluation.

(ii) Follow the disposal requirements for spent carbon in §63.693(d)(4).

(2) If you use a nonregenerable carbon adsorption system, you must:

(i) Replace the existing adsorbent in each segment of the bed with an adsorbent that meets the replacement specifications established during the design evaluation before the age of the adsorbent exceeds the maximum allowable age established during the design evaluation.

(ii) Meet the disposal requirements for spent carbon in §63.693(d)(4)(ii).

(3) If you use a nonregenerative carbon adsorption system, you may choose to comply with the requirements in paragraphs (h)(3)(i) and (ii) of this section as an alternative to the requirements in paragraph (h)(2) of this section. You must:

(i) Immediately replace the carbon canister or carbon in the control device when the monitoring device indicates breakthrough has occurred according to the requirements in §63.693(d)(4)(iii)(A), or replace the carbon canister or carbon in the control device at regular intervals according to the requirements in §63.693(d)(4)(iii)(B).

(ii) Follow the disposal requirements for spent carbon in §63.693(d)(4)(ii).

(i) If you use a catalytic incinerator, you must replace the existing catalyst bed with a bed that meets the replacement specifications before the age of the bed exceeds the maximum allowable age established in the design evaluation or during the performance test.

(j) As provided in §63.6(g), you may request approval from the EPA to use an alternative to the work practice standards in this section that apply to your closed vent systems and control devices. If you request for permission to use an alternative to the work practice standards, you must submit the information described in §63.6(g)(2).

91. <u>63.7926 How do I demonstrate initial compliance with the emission limitations and work practice standards for closed vent systems and control devices?</u>

(a) You must demonstrate initial compliance with the emissions limitations and work practice standards in this subpart applicable to your closed vent system and control device by meeting the requirements in paragraphs (b) through (h) of this section that apply to your closed vent system and control device.

(b) You must demonstrate initial compliance with the closed vent system work practice standards in §63.7925(c) if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (b)(1) and (2) of this section.

(1) You have installed a closed vent system that meets the requirements in §63.695(c)(1) and (2), and you have records documenting the equipment design and installation.

(2) You have performed the initial inspection of the closed vent system according to the requirements in §63.695(c)(1)(i) or (ii), and you have records documenting the inspection results.

(c) You must demonstrate initial compliance of each control device subject to the emissions limits in §63.7925(d) with the applicable emissions limit in §63.7925(d) if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (c)(1) and (2) of this section that apply to you.

(1) For the emissions limit in §63.7925(d)(1), the emissions of total HAP listed in Table 1 of this subpart or TOC (minus methane and ethane) from the control device, measured or determined according to the procedures for performance tests and design evaluations in §63.7941, are reduced by at least 95 percent by weight.

(2) For the emissions limit in §63.7925(d)(2), the concentration of total HAP listed in Table 1 of this subpart or TOC (minus methane and ethane) from the combustion control device, measured by a performance test or determined by a design evaluation according to the procedures in §63.7941, do not exceed 20 ppmv on a dry basis corrected to 3 percent oxygen.

(d) You must demonstrate initial compliance of each control device subject to operating limits in §63.7925(g) with the applicable limits if you have submitted as part of your notification of compliance status,

specified in §63.7950, a signed statement that you have met the requirements in paragraphs (d)(1) and (2) of this section.

(1) You have established an appropriate operating limit(s) for each of the operating parameter applicable to your control device as specified in §63.7925(g)(1) through (6).

(2) You have a record of the applicable operating parameter data during the performance test or design evaluation during which the emissions met the applicable limit.

(e) You must demonstrate initial compliance with the spent carbon replacement and disposal work practice standards for carbon adsorption systems in §63.7925(h) if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you will comply with each work practice standard that applies to your carbon adsorption system.

(f) You must demonstrate initial compliance with the catalyst replacement work practice standards for catalytic incinerators in §63.7925(i) if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you will comply with the specified work practice standard.

(g) You must demonstrate initial compliance of each flare with the work practice standards in §63.7925(e) if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (g)(1) through (3) of this section.

(1) Each flare meets the requirements in §63.11(b).

(2) You have performed a visible emissions test, determined the net heating value of gas being combusted, and determined the flare exit velocity as required in §63.693(h)(2).

(3) You will operate each flare according to the requirements in §63.11(b).

(h) You must demonstrate initial compliance of each boiler or process heater with the work practice standards in §63.7925(f) if you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (h)(1) through (3) of this section.

(1) For the work practice standards in §63.7925(f)(1), you have records documenting that the boiler or process heater is designed to operate at a residence time of 0.5 seconds or greater and maintain the combustion zone temperature at 760°C or greater.

(2) For the work practice standard in §63.7925(f)(2), you have records documenting that the vent stream is introduced with the fuel according to the requirements in §63.693(g)(1)(iv), or that the vent stream is introduced to a boiler or process heater that meets the requirements in §63.693(g)(1)(v).

(3) For the work practice standard in §63.7925(f)(3), you have records documenting you either have been issued a final permit under 40 CFR part 270 and your boiler or process heater complies with the requirements of 40 CFR part 266, subpart H--Hazardous Waste Burned in Boilers and Industrial Furnaces; or has been certified in compliance with the interim status requirements of 40 CFR part 266, subpart H.

92. 63.7927 What are my inspection and monitoring requirements for closed vent systems and control devices?

(a) You must comply with the requirements in paragraphs (a)(1) and (2) of this section for each closed vent system.

(1) You must monitor and inspect each closed vent system according to the requirements in either paragraph (a)(1)(i) or (ii) of this section.

(i) You must monitor, inspect, and repair defects according to the requirements in §63.695(c)(1)(ii) through (c)(3); or

(ii) You must monitor and inspect the closed vent system according to the requirements in §63.172(f) through (j) and record the information in §63.181.

(2) If your closed vent system includes a bypass device, you must meet the requirements in either paragraph (a)(2)(i) or (ii) of this section.

(i) Use a flow indicator to determine if the presence of flow according to the requirements in §63.693(c)(2)(i); or

(ii) Use a seal or locking device and make monthly inspections as required by §63.693(c)(2)(ii).

(b) If you use a regenerable carbon adsorption system, you must meet the requirements in paragraphs (b)(1) through (3) of this section.

(1) Use a continuous parameter monitoring system (CPMS) to measure and record the hourly average total regeneration stream mass flow during each carbon adsorption cycle.

(2) Use a CPMS to measure and record the hourly average temperature of the adsorption bed during regeneration (except during the cooling cycle).

(3) Use a CPMS to measure and record the hourly average temperature of the adsorption bed after regeneration (and within 15 minutes of after completing any cooling cycle).

(c) If you use a nonregenerable carbon adsorption system, you must use a CPMS to measure and record the hourly average temperature of the adsorption bed or you must monitor the concentration of organic compounds in the exhaust vent stream according to the requirements in §63.693(d)(4)(iii)(A).

(d) If you use a condenser, you must use a CPMS to measure and record the hourly average condenser exit temperature and determine and record the daily average condenser exit temperature.

(e) If you use a thermal incinerator, you must use a CPMS to measure and record the hourly average firebox temperature and determine and record the daily average firebox temperature.

(f) If you use a catalytic incinerator, you must use a CPMS with two temperature sensors to measure and record the hourly average temperature at the inlet of the catalyst bed, the hourly average temperature at the

outlet of the catalyst bed, the hourly average temperature difference across the catalyst bed, and to determine and record the daily average temperature difference across the catalyst bed.

(g) If you use a boiler or process heater to meet an emission limitation, you must use a CPMS to measure and record the hourly average firebox temperature and determine and record the daily average firebox temperature.

(h) If you use a flare, you must monitor the operation of the flare using a heat sensing monitoring device according to the requirements in §63.693(h)(3).

(i) If you introduce the vent stream into the flame zone of a boiler or process heater according to the requirements in §63.7925(f)(1), you must use a CPMS to measure and record the combustion zone temperature.

93. 63.7928 How do I demonstrate continuous compliance with the emissions limitations and work practice standards for closed vent systems and control devices?

(a) You must demonstrate continuous compliance with the emissions limitations and work practice standards in this subpart applicable to your closed vent system and control device by meeting the requirements in paragraphs (b) through (j) of this section as applicable to your closed vent system and control device.

(b) You must demonstrate continuous compliance with the closed vent system work practice standards in §63.7925(c) by meeting the requirements in paragraphs (b)(1) through (7) of this section.

(1) For a closed vent system designed to operate with no detectable organic emissions, visually inspecting the closed vent system at least annually, monitoring after a repair or replacement using the procedures in §63.694(k), and monitoring at least annually according to the requirements in §63.695(c)(1)(ii).

(2) For a closed vent system designed to operate below atmospheric pressure, visually inspecting the closed vent system at least annually according to the requirements in §63.695(c)(2)(ii).

(3) Repairing defects according to the requirements in §63.695(c)(3).

(4) Keeping records of each inspection that include the information in paragraphs (b)(4)(i) through (iii) of this section:

(i) A closed vent system identification number (or other unique identification description you select).

(ii) Date of each inspection.

(iii) If a defect is detected during an inspection, the location of the defect, a description of the defect, the date of detection, the corrective action taken to repair the defect, and if repair is delayed, the reason for any delay and the date completion of the repair is expected.

(5) If you elect to monitor the closed vent system according to the requirements in §63.172(f) through (j), recording the information in §63.181.

(6) If the closed vent system is equipped with a flow indicator, recording the information in §63.693(c)(ii)(i).

(7) If the closed vent system is equipped with a seal or locking device, visually inspecting the seal or closure mechanism at least monthly according to the requirements in §63.693(c)(ii)(i), and recording the results of each inspection.

(c) You must demonstrate continuous compliance of each control device subject to the emissions limits in §63.7925(d) with the applicable emissions limit in §63.7925(d) by meeting the requirements in paragraphs (c)(1) and (2) of this section.

(1) For the emission limit in §63.7925(d)(1), maintaining the reduction in emissions of total HAP listed in Table 1 of this subpart or TOC (minus methane and ethane) from the control device at 95 percent by weight or greater.

(2) For the emission limit in §63.7925(d)(2), maintaining the concentration of total HAP listed in Table 1 of this subpart or TOC (minus methane and ethane) from the control device at 20 ppmv or less.

(d) You must demonstrate continuous compliance of each control device subject to operating limits in §63.7925(g) with the applicable limits by meeting the requirements in paragraphs (d)(1) through (4) of this section.

(1) Maintaining each operating limit according to the requirements in §63.7925(g) as applicable to the control device.

(2) Monitoring and inspecting each control device according to the requirements in §63.7927(b) through (i) as applicable to the control device.

(3) Operating and maintaining each continuous monitoring system according to the requirements in §63.7945, and collecting and reducing data according to the requirements in §63.7946.

(4) Keeping records to document compliance with the requirements of this subpart according to the requirements in §63.7952.

(e) You must demonstrate continuous compliance with the spent carbon replacement and disposal work practice standards for regenerable carbon adsorption systems in §63.7925(h)(1) by meeting the requirements in paragraphs (e)(1) through (3) of this section.

(1) Replacing the adsorbent as required by §63.7925(h)(1)(i).

(2) Following the disposal requirements for spent carbon in §63.693(d)(4)(ii).

(3) Keeping records to document compliance with the requirements of the work practice standards.

(f) You must demonstrate continuous compliance with the spent carbon replacement and disposal work practice standards for nonregenerable carbon adsorption systems in §63.7925(h)(2) by meeting the requirements in paragraphs (f)(1) through (3) of this section.

(1) Replacing the adsorbent as required by the work practice standard in §63.7925(h)(2)(i).

(2) Following the disposal requirements for spent carbon in §63.693(d)(4)(ii).

(3) Keeping records to document compliance with the requirements of the work practice standards.

(g) You must demonstrate continuous compliance with the spent carbon replacement and disposal work practice standards for nonregenerable carbon adsorption systems in §63.7925(h)(3) by meeting the requirements in paragraphs (g)(1) through (3) of this section.

(1) Monitoring the concentration level of the organic compounds in the exhaust vent for the carbon adsorption system as required in §63.7927(c), immediately replacing the carbon canister or carbon in the control device when breakthrough is indicated by the monitoring device, and recording the date of breakthrough and carbon replacement. Or, you must replace the carbon canister or carbon in the control device at regular intervals and record the date of carbon replacement.

(2) Following the disposal requirements for spent carbon in §63.693(d)(4)(ii).

(3) Keeping records to document compliance with the requirements of the work practice standards.

(h) You must demonstrate continuous compliance with the catalyst replacement work practice standards for catalytic incinerators in §63.7925(i) by meeting the requirements in paragraphs (h)(1) and (2) of this section.

(1) Replacing the existing catalyst bed as required in §63.7925(i).

(2) Keeping records to document compliance with the requirements of the work practice standards.

(i) You must demonstrate continuous compliance of each flare with the work practice standards in §63.7925(e) by meeting the requirements in paragraphs (i)(1) through (5) of this section.

(1) Operating the flare with no visible emissions except for up to 5 minutes in any 2 consecutive hours according to the requirements in §63.11(b)(4).

(2) Monitoring the presence of a pilot flare according to the requirements in §63.7927(h) and maintaining a pilot flame and flare flame at all times that emissions are not vented to the flare according to the requirements in §63.11(b)(5).

(3) Operating the flare with an exit velocity according to the requirements in §63.11(b)(6) through (8).

(4) Operating the flare with a net heating value of the gas being combusted according to the requirements in §63.11(b)(6)(ii).

(5) Keeping records to document compliance with the requirements of the work practice standards.

(j) You must demonstrate continuous compliance of each boiler or process heater with the work practice standards in §63.7925(f) by meeting the requirements in paragraphs (j)(1) through (3) of this section.

(1) For the work practice standards in §63.7925(f)(1), you must demonstrate continuous compliance by meeting the requirements in paragraphs (j)(1)(i) through (iv).

(i) Maintaining conditions in the combustion chamber at a residence time of 0.5 seconds or longer and at a combustion zone temperature at 760°C or greater whenever the vent stream is introduced to the flame zone of the boiler or process heater.

(ii) Monitoring each boiler or process heater according to the requirements in §63.7927(i).

(iii) Operating and maintaining each continuous monitoring system according to the requirements in §63.7945, and collecting and reducing data according to the requirements in §63.7946.

(iv) Keeping records to document compliance with residence time design requirement.

(2) For the work practice standards in §63.7925(f)(2), you maintain the boiler or process heater operations such that the vent stream is introduced with the fuel according to the requirements in §63.693(g)(1)(iv), or that the vent stream is introduced to a boiler or process heater that meets the requirements in §63.693(g)(1)(v).

(3) For the work practice standard in §63.7925(f)(3), you remain in compliance with all terms and conditions of the final permit under 40 CFR part 270 and your boiler or process heater complies with the requirements of 40 CFR part 266, subpart H--Hazardous Waste Burned in Boilers and Industrial Furnaces; or in

compliance with the interim status requirements of 40 CFR part 266, subpart H, as applicable to your boiler or process heater.

General Compliance Requirements

94. 63.7935 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emissions limitations (including operating limits) and the work practice standards in this subpart at all times, except during periods of startup, shutdown, and malfunction.

(b) You must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in §63.6(e)(1)(i).

(c) You must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in §63.6(e)(3).

(d) During periods of startup, shutdown, and malfunction, you must operate according to the SSMP.

(e) You must report each instance in which you did not meet each emissions limitation and each operating limit that applies to you. This includes periods of startup, shutdown, and malfunction. You must also report each instance in which you did not meet the requirements for work practice standards that apply to you. These instances are deviations from the emissions limitations and work practice standards in this subpart. These deviations must be reported according to the requirements in §63.7951.

(f) Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating according to the SSMP. We will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in §63.6(e).

(g) For each monitoring system required in this section, you must develop and make available for inspection by the permitting authority, upon request, a site-specific monitoring plan that addresses the following:

(1) Installation of the continuous monitoring system sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device).

(2) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system.

(3) Performance evaluation procedures and acceptance criteria (e.g., calibrations).

(h) In your site-specific monitoring plan, you must also address the following:

(1) Ongoing operation and maintenance procedures according to the general requirements of §63.8(c)(1), (3), (4)(ii), (7), and (8).

(2) Ongoing data quality assurance procedures according to the general requirements of §63.8(d).

(3) Ongoing recordkeeping and reporting procedures according to the general requirements of §63.10(c), (e)(1), and (e)(2)(i).

(i) You must operate and maintain the continuous monitoring system according to the site-specific monitoring plan.

(j) You must conduct a performance evaluation of each continuous monitoring according to your site-specific monitoring plan.

95. <u>63.7936 What requirements must I meet if I transfer remediation material off-site to another facility?</u>

(a) If you transfer to another facility a remediation material generated by your remediation activities and having an average total VOHAP concentration equal to or greater than 10 ppmw (as determined using the

procedures specified in §63.7943), then you must transfer the remediation material to a facility that meets the requirements in paragraph (b) of this section. You must record the name, street address, and telephone number of the facility where you send this remediation material.

(b) You may elect to transfer the remediation material to one of the following facilities:

(1) A facility where your remediation material will be directly disposed in a landfill or other land disposal unit according to all applicable Federal and State requirements.

(2) A facility subject to 40 CFR part 63, subpart DD where the exemption under §63.680(b)(2)(iii) is waived and air emissions from the management of your remediation material at the facility are controlled according to all applicable requirements in the subpart for an off-site material. Prior to sending your remediation material, you must obtain a written statement from the owner or operator of the facility to which you send your remediation material acknowledging that the exemption under §63.680(b)(2)(iii) will be waived for all remediation material received at the facility from you and your material will be managed as an off-site material at the facility according to all applicable requirements. This statement must be signed by the responsible official of the receiving facility, provide the name and address of the receiving facility, and a copy sent to the appropriate EPA Regional Office at the addresses listed in 40 CFR 63.13.

(3) A facility where your remediation material will be managed according to all applicable requirements under this subpart.

(i) You must prepare and include a notice with each shipment or transport of remediation material from your site. This notice must state that the remediation material contains organic HAP that are to be treated according to the provisions of this subpart. When the transport is continuous or ongoing (for example, discharge to a publicly owned treatment works), the notice must be submitted to the receiving facility owner or operator initially and whenever there is a change in the required treatment.

(ii) You may not transfer the remediation material unless the owner or operator of the facility receiving your remediation material has submitted to the EPA a written certification that the he or she will manage remediation material received from you according to the requirements of §§63.7885 through 63.7957. The receiving facility owner or operator may revoke the written certification by sending a written statement to the EPA and to you providing at least 90 days notice that they rescind acceptance of responsibility for compliance with the regulatory provisions listed in this section. Upon expiration of the notice period, you may not transfer your remediation material to the facility.

(iii) By providing the written certification to the EPA, the receiving facility owner or operator accepts responsibility for compliance with the regulatory provisions listed in paragraph (b)(3) of this section with respect to any shipment of remediation material covered by the written certification. Failure to abide by any of those provisions with respect to such shipments may result in enforcement action by the EPA against the certifying entity according to the enforcement provisions applicable to violations of these provisions by owners or operators of sources.

(iv) Written certifications and revocation statements to the EPA from the receiving facility owner or operator must be signed by the responsible official of the receiving facility, provide the name and address of the receiving facility, and a copy sent to the appropriate EPA Regional Office at the addresses listed in 40 CFR 63.13. Such written certifications are not transferable.

(c) Acceptance by a facility owner or operator of remediation material from a site remediation subject to this subpart does not, by itself, require the facility owner or operator to obtain a title V permit under 40 CFR 70.3 or 40 CFR 71.3.

96. <u>63.7937 How do I demonstrate initial compliance with the general standards?</u>

(a) You must demonstrate initial compliance with the general standards in §§63.7884 through 63.7887 that apply to your affected sources by meeting the requirements in paragraphs (b) through (d) of this section, as applicable to you.

(b) You must demonstrate initial compliance with the general standards in §63.7885 that apply to your affected process vents by meeting the requirements in paragraphs (1) through (4) of this section, as applicable to your process vents.

(1) If HAP emissions are controlled from the affected process vents according to the emission limitations and work practice standards specified in §63.7885(b)(1), you have met the initial compliance requirements in §63.7891.

(2) If the remediation material treated or managed by the process vented through the affected process vents has an average total VOHAP less than 10 ppmw according to §63.7885(b)(2), you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have determined, according to the procedures §63.7943, and recorded the average VOHAP concentration of the remediation material placed in the affected remediation material management unit.

(3) If HAP emissions are controlled from the affected process vents to meet standards in another subpart under 40 CFR part 61 or 40 CFR part 63 according to §63.7885(b)(3), you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (b)(3)(i) and (ii) of this section.

(i) You include in your statement the citations for the specific emission limitations and work practice standards that apply to the process vents under the subpart in 40 CFR part 61 or 40 CFR part 63 that the vents are also subject.

(ii) You are complying with all applicable emissions limitations and work practice standards specified by the applicable subpart.

(4) For each process vent exempted according to §63.7885(c), you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (b)(4)(i) and (ii) of this section.

(i) You identify in your statement each process vent that qualifies for an exemption and the exemption conditions in §63.7885(c)(1)(i) or (ii) that apply to each exempted process vent.

(ii) You have performed the measurements and prepared the documentation required in §63.7885(c)(2) that demonstrates that each exempted process vent stream meets the applicable exemption conditions in §63.7885(c)(1).

(c) You must demonstrate initial compliance with the general standards in §63.7886 that apply to your affected remediation material management units by meeting the requirements in paragraphs (1) through (6) of this section, as applicable to your remediation material management units.

(1) If the remediation material management unit uses air pollution controls according to the standards specified in §63.7886(b)(1), you have met the initial compliance requirements applicable to the remediation material management unit in §§63.7896, 63.7901, 63.7906, 63.7911, or 63.7816.

(2) If the remediation material managed in the affected remediation material managements has an average total VOHAP less than 500 ppmw according to §63.7886(b)(2), you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have determined, according to the procedures §63.7943, and recorded the average VOHAP concentration of the remediation material placed in the affected remediation material management unit.

(3) If HAP emissions are controlled from the affected remediation material management units to meet standards in another subpart under 40 CFR part 61 or 40 CFR part 63 according to §63.7886(b)(3), you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (c)(3)(i) and (ii) of this section.

(i) You include in your statement the citations for the specific emission limitations and work practice standards that apply to the remediation material management units under the subpart in 40 CFR part 61 or 40 CFR part 63 that the units are also subject.

(ii) You are complying with all applicable emissions limitations and work practice standards specified by the applicable subpart.

(4) If HAP emissions are controlled from the affected remediation material management unit that is an open tank or surface impoundment used for a biological treatment process according to §63.7886(b)(4), you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (c)(4)(i) and (ii) of this section.

(i) You have performed the measurements and prepared the documentation required in §63.7886(4)(i) that demonstrates that each unit meets the applicable performance levels.

(ii) You will monitor the biological treatment process conducted in each unit according the requirements in §63.7886(4)(i).

(5) For each remediation material management unit used for cleanup of radioactive mixed waste and exempted according to §63.7886(c), you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (c)(5)(i) and (ii) of this section.

(i) You include in your statement the citations for the specific requirements that apply to the remediation material management units under regulations, directives, and other requirements under the Atomic Energy Act, the Nuclear Waste Policy Act, or the Waste Isolation Pilot Plant Land Withdrawal Act.

(ii) You are complying with all requirements that apply to the remediation material management units under the applicable regulations or directives.

(6) For each remediation material management unit exempted according to §63.7886(d), you have submitted as part of your notification of compliance status, specified in §63.7950, a signed statement that you have met the requirements in paragraphs (c)(6)(i) and (ii) of this section.

(i) You have designated according to the requirements in §63.7886(d)(1) each of the remediation material management units you are selecting to be exempted.

(ii) You have performed an initial determination and prepared the documentation required in §63.7886(d)(2) that demonstrates that the total annual HAP quantity (based on the HAP listed in Table 1 of this subpart) in the remediation material placed in all of the designated exempted remediation material management units will be less than 1 Mg/yr.

(d) You must demonstrate initial compliance with the general standards in §63.7887 that apply to your affected equipment leak sources by meeting the requirements in §63.7921.

97. <u>63.7938 How do I demonstrate continuous compliance with the general standards?</u>

(a) You must demonstrate continuous compliance with the general standards in §§63.7884 through 63.7887 that apply to your affected sources by meeting the requirements in paragraphs (b) through (d) of this section, as applicable to you.

(b) You have demonstrated continuous compliance with the general standards in §63.7885 that apply to your affected process vents by meeting the requirements in paragraphs (1) through (4) of this section, as applicable to your process vents.

(1) If HAP emissions are controlled from the affected process vents according to the emission limitations and work practice standards specified in §63.7885(b)(1), you must demonstrate continuous compliance by meeting the requirements in §63.7893.

(2) If the remediation material treated or managed by the process vented through the affected process vents has an average total VOHAP less than 10 ppmw according to §63.7885(b)(2), you must demonstrate continuous compliance by performing a new determination and preparing new documentation as required in §63.7886(c)(2) to show that the total VOHAP concentration of the remediation material remains less than 10 ppmw.

(3) If HAP emissions are controlled from the affected process vents to meet standards in another subpart under 40 CFR part 61 or 40 CFR part 63 according to §63.7885(b)(3), you must demonstrate continuous compliance by complying with all applicable emissions limitations and work practice standards specified by the applicable subpart.

(4) For each process vent exempted according to §63.7885(c), you must demonstrate continuous compliance by performing new measurements and preparing new documentation as required in §63.7885(c)(2) that demonstrates that each exempted process vent stream meets the applicable exemption conditions in §63.7885(c)(1).

(c) You must demonstrate continuous compliance with the general standards in §63.7886 that apply to your affected remediation material management units by meeting the requirements in paragraphs (1) through (6) of this section, as applicable to your remediation material management units.

(1) If the remediation material management unit uses air pollution controls according to the standards specified in §63.7886(b)(1), you must demonstrate continuous compliance by meeting the requirements applicable to the remediation material management unit in §§63.7898, 63.7903, 63.7908, 63.7913, or 63.7818.

(2) If the remediation material managed in the affected remediation material managements has an average total VOHAP concentration less than 500 ppmw according to §63.7886(b)(2), you must demonstrate continuous compliance by performing a new determination and preparing new documentation as required in §63.7886(c)(2) to show that the total VOHAP concentration of the remediation material remains less than 500 ppmw.

(3) If HAP emissions are controlled from the affected remediation material management units to meet standards in another subpart under 40 CFR part 61 or 40 CFR part 63 according to §63.7886(b)(3), you must demonstrate continuous compliance by meeting all applicable emissions limitations and work practice standards specified by the applicable subpart.

(4) If HAP emissions are controlled from the affected remediation material management unit that is an open tank or surface impoundment used for a biological treatment process according to §63.7886(b)(4), you must demonstrate continuous compliance by meeting the requirements in paragraphs (c)(4)(i) and (ii) of this section.

(i) Performing new measurements and preparing new documentation as required in §63.7886(4)(i) that demonstrates that each unit meets the applicable performance levels.

(ii) Monitoring the biological treatment process conducted in each unit according the requirements in §63.7886(4)(i).

(5) For each remediation material management unit used for cleanup of radioactive mixed waste and exempted according to §63.7886(c), you must demonstrate continuous compliance by meeting all requirements that apply to the remediation material management units under the applicable regulations or directives.

(6) For each remediation material management unit exempted according to §63.7886(d), you must demonstrate continuous compliance by performing new measurements and preparing new documentation as required in §63.7886(d)(2) to show that the total annual HAP quantity (based on the HAP listed in Table 1 of this subpart) in the remediation material placed in all of the designated exempted remediation material management units remains less than 1 Mg/yr.

(d) You have demonstrated continuous compliance with the general standards in §63.7887 that apply to your affected equipment leak sources by meeting the requirements in §63.7923.

Performance Tests

98. 63.7940 By what date must I conduct performance tests or other initial compliance demonstrations?

(a) You must conduct a performance test or design evaluation for each existing affected source within 180 calendar days after the compliance date that is specified in §63.7883.

(b) For each work practice standard that applies to you where initial compliance is not demonstrated using a performance test or design evaluation, you must demonstrate initial compliance within 30 calendar days after the compliance date that is specified in §63.7883 for your affected source.

(c) For new sources, you must conduct initial performance tests and other initial compliance demonstrations according to the provisions in §63.7(a)(2)(i) and (ii).

99. 63.7941 How do I conduct a performance test, design evaluation, or other type of initial compliance demonstration?

(a) You must conduct a performance test or design evaluation to demonstrate initial compliance for each new or existing affected source that is subject to an emission limit in this subpart. You must report the results of the performance test or design evaluation according to the requirements in §63.7950(e)(1).

(b) If you choose to conduct a performance test to demonstrate initial compliance, you must conduct the test according to the requirements in §63.7(e)(1) and paragraphs (b)(1) through (5) of this section.

(1) You must conduct three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour.

(2) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §63.7(e)(1).

(3) You must conduct each performance test using the test methods and procedures in §63.694(l).

(4) Follow the procedures in paragraphs (b)(4(i) through (iii) of this section to determine compliance with the facility-wide total organic mass emissions rate in §63.7890(a)(1)(i).

(i) Determine compliance with the total organic mass flow rate using Equation 1 of this section as follows:

$$E_h = (0.0416\times10^{-6})Q_{sd}\sum_{i=1}^{n}(C_i\times MW_i) \qquad \text{(Eq. 1)}$$

Where:

E_h = Total organic mass flow rate, kg/h;
Q_{sd} = Volumetric flow rate of gases entering or exiting control device (or exiting the process vent if no control device is used), as determined by Method 2 of 40 CFR part 60, appendix A, dscm/h;
n = Number of organic compounds in the vent gas;
C_i = Organic concentration in ppm, dry basis, of compound i in the vent gas, as determined by Method 18 of 40 CFR part 60, appendix A;
MW_i = Molecular weight of organic compound i in the vent gas,kg/kg-mol;

(ii) Determine compliance with the annual total organic emissions rate using Equation 2 of this section as follows:

$$E_A = E_h \times H \qquad \text{(Eq. 2)}$$

Where:

E_A = Total organic mass emissions rate, kilograms per year;
E_h = Total organic mass flow rate for the process vent, kg/h;
H = Total annual hours of operation for the affected unit, h.

(iii) Determine compliance with the total organic emissions limit from all affected process vents at the facility by summing the total hourly organic mass emissions rates (E_h as determined in Equation 1 of this section) and summing the total annual organic mass emissions rates (E_A, as determined in Equation 2 of this section) for all affected process vents at the facility.

(5) Determine compliance with the 95 percent reduction limit in §63.7890(a)(2)(i) for the combination of all affected process vents at the facility using Equations 3 and 4 of this section to calculate control device inlet and outlet concentrations and Equation 5 of this section to calculate control device emission reductions for process vents as follows:

$$E_i = K_2 \left(\sum_{j=1}^{n} C_{ij} M_{ij} \right) Q_i \qquad (Eq.\ 3)$$

$$E_o = K_2 \left(\sum_{j=1}^{n} C_{oj} M_{oj} \right) Q_o \qquad (Eq.\ 4)$$

Where:

C_{ij}, C_{oj} = Concentration of sample component j of the gas stream at the inlet and outlet of the control device, dry basis, parts per million by volume. For uncontrolled vents, $C_{ij} = C_{oj}$ and equal the concentration exiting the vent;

E_i, E_o = Mass rate of total organic compounds (TOC) (minus methane and ethane) or total HAP, from Table 1 of this subpart, at the inlet and outlet of the control device, respectively, dry basis, kilogram per hour. For uncontrolled vents, $E_i = E_o$ and equal the concentration exiting the vent;

M_{ij}, M_{oj} = Molecular weight of sample component j of the gas stream at the inlet and outlet of the control device, respectively, gram/gram-mole. For uncontrolled vents, $M_{ij} = M_{oj}$ and equal the gas stream molecular weight exiting the vent;

Q_i,Q_o = Flowrate of gas stream at the inlet and outlet of the control device, respectively, dry standard cubic meters per minute (dscm/min). For uncontrolled vents, $Q_i = Q_o$ and equals the flowrate exiting the vent;

K_2 = Constant, 2.494 X 10^{-6} (parts per million)$^{-1}$(gram-mole per standard cubic meter)(kilogram/gram)(minute/hour, where standard temperature (gram-mole per standard cubic meter) is 20°C;

n = the number of components in the sample.

$$R_v = \frac{\sum_{j=1}^{n} E_i - \sum_{j=1}^{n} E_o}{\sum_{j=1}^{n} E_i} x\ 100 \qquad \text{(Eq. 5)}$$

Where:

R_v = Overall emissions reduction for all affected process vents, percent

E_i = Mass rate of TOC (minus methane and ethane) or total HAP, from Table 1 of this subpart, at the inlet to the control device, or exiting the vent for uncontrolled vents, as calculated in this section, kilograms TOC per hour or kilograms HAP per hour;

E_o = Mass rate of TOC (minus methane and ethane) or total HAP, from Table 1 of this subpart, at the outlet to the control device, or exiting the vent for uncontrolled vents, as calculated in this section, kilograms TOC per hour or kilograms HAP per hour. For vents without a control device, $E_o = E_i$;

n = number of affected source process vents.

(c) If you use a carbon adsorption system, condenser, vapor incinerator, boiler, or process heater to meet an emission limit in this subpart, you may choose to perform a design evaluation to demonstrate initial compliance instead of a performance test. You must perform a design evaluation according to the general requirements in §63.693(b)(8) and the specific requirements in §63.694(d)(2)(ii) for a carbon adsorption system (including establishing carbon replacement schedules and associated requirements), §63.694(e)(2)(ii) for a condenser, §63.694(f)(2)(ii) for a vapor incinerator, or §63.694(g)(2)(i)(B) for a boiler or process heater.

(d) During the performance test or design evaluation, you must collect the appropriate operating parameter monitoring system data, average the operating parameter data over each test run, and set operating limits, whether a minimum or maximum value, based on the average of values for each of the three test runs. If you use a control device design analysis to demonstrate control device performance, then the minimum or maximum operating parameter value must be established based on the control device design analysis and supplemented, as necessary, by the control device manufacturer recommendations or other applicable information.

(e) If you control air emissions from an affected source by introducing the vent stream into the flame zone of a boiler or process heater according to the requirements in §63.693(g)(1)(iii), you must conduct a performance test or design evaluation to demonstrate that the boiler or process heater meets the applicable emission limit while operating at a residence time of 0.5 seconds or greater and at a combustion zone temperature of 760°C or higher.

(f) You must conduct a performance evaluation for each continuous monitoring system according to the requirements in §63.8(e).

(g) If you are required to conduct a visual inspection of an affected source, you must conduct the inspection according to the procedures in §63.906(a)(1) for Tank Level 1 controls, §63.1063(d) for Tank Level 2

controls, §63.946(a) for a surface impoundment equipped with a floating membrane cover, §63.946(b) for a surface impoundment equipped with a cover and vented to a control device, §63.1047(a) for a separator with a fixed roof, §63.1047(c) for a separator equipped with a fixed roof and vented to a control device, §63.695(c)(1)(i) or (c)(2)(i) for a closed vent system, and §63.964(a) for individual drain systems.

(h) If you use Container Level 1 controls, you must conduct a test to demonstrate that the container operates with no detectable organic emissions using Method 21 (40 CFR part 60, appendix A) and the procedures in §63.925(a).

(i) If you use Container Level 2 controls, you must conduct a test to demonstrate that the container operates with no detectable organic emissions or that the container is vapor-tight. You must conduct the test using Method 21 (40 CFR part 60, appendix A) and the procedures in §63.925(a) to demonstrate that the container operates with no detectable organic emissions or Method 27 (40 CFR part 60, appendix A) and the procedures in §63.925(b) to demonstrate that the container is vapor-tight.

(j) If you locate an affected source inside a permanent total enclosure that is vented to a control device, you must demonstrate that the enclosure meets the verification criteria in section 5 of Procedure T in 40 CFR 52.741, appendix B.

(k) If you use a fixed roof or a floating roof to control air emissions from a separator, you must conduct a test to demonstrate that the roof operates with no detectable organic emissions using Method 21 (40 CFR part 60, appendix A) and the procedures in §63.1046(a). If you use a floating roof, you also must measure the seal gaps according to the procedures in §63.1046(b).

(l) If you use a flare to control air emissions, you must conduct a visible emissions test using Method 22 in 40 CFR part 60, appendix A, and the procedures in §63.11(b)(4).

(m) For each initial compliance demonstration that requires a performance test or design evaluation, you must report the results in your notification of compliance status according to the requirements in §63.7950(e)(1). For each initial compliance demonstration that does not require a performance test or design evaluation, you must submit a notification of compliance status according to the requirements in §63.7950(e)(2).

100. 63.7942 When must I conduct subsequent performance tests?

For non-flare control devices, you must conduct performance tests at any time the EPA requires you to according to §63.7(3).

101. 63.7943 How do I determine the average VOHAP concentration of my remediation material?

(a) General requirements. You must determine the average total VOHAP concentration of a remediation material at the point-of-extraction using either direct measurement as specified in paragraph (b) of this section or by knowledge as specified in paragraph (c) of this section.

(b) Direct measurement. To determine the average total VOHAP concentration of a remediation material at the point-of-extraction using direct measurement, you must use the procedures in paragraphs (b)(1) through (3) of this section.

(1) Sampling. Samples of each material stream must be collected at the point-of-extraction in a manner such that volatilization of organics contained in the sample is minimized and an adequately representative sample is collected and maintained for analysis by the selected method.

(i) The averaging period to be used for determining the average total VOHAP concentration for the material stream on a mass-weighted average basis must be designated and recorded. The averaging period can represent any time interval that you determine is appropriate for the material stream but must not exceed 1 year. For streams that are combined, an averaging period representative for all streams must be selected.

(ii) No less than four samples must be collected to represent the complete range of HAP compositions and HAP quantities that occur in each material stream during the entire averaging period due to normal variations in the material stream(s). Examples of such normal variations are variation of the HAP concentration within a contamination area.

(iii) All samples must be collected and handled according to written procedures you prepare and document in a site sampling plan. This plan must describe the procedure by which representative samples of the material stream(s) are collected such that a minimum loss of organics occurs throughout the sample collection and handling process and by which sample integrity is maintained. A copy of the written sampling plan must be maintained on site in the facility operating records. An example of an acceptable sampling plan includes a plan incorporating sample collection and handling procedures according to the guidance found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 or Method 25D in 40 CFR part 60, appendix A.

(2) Analysis. Each collected sample must be prepared and analyzed according to either one of the methods listed in §63.694(b)(2)(ii), or any current EPA Contracts Lab Program method (or future revisions) capable of identifying all the HAP in Table 1 of this subpart.

(3) Calculations. The average total VOHAP concentration ($\bar{C}$) on a mass-weighted basis must be calculated by using the results for all samples analyzed according to paragraph (c)(2) of this section and Equation 1 of this section as follows:

$$\bar{C} = \frac{1}{Q_T} \times \sum_{i=1}^{n} \left(Q_i \times C_i\right) \qquad \text{(Eq. 1)}$$

Where:

$\bar{C}$	=	Average VOHAP concentration of the material on a mass-weighted basis, ppmw.
i	=	Individual sample "i" of the material.
n	=	Total number of samples of the material collected (at least 4 per stream) for the averaging period (not to exceed 1 year).
Q_i	=	Mass quantity of material stream represented by C_i, kilograms per hour (kg/hr).
Q_T	=	Total mass quantity of all material during the averaging period, kg/hr.
C_i	=	Measured VOHAP concentration of sample "i" as determined according to the requirements of paragraph (a)(3)(ii) of this section, ppmw.

(c) Knowledge of the material. To determine the average total VOHAP concentration of a remediation material at the point-of-extraction using knowledge, you must use the procedures in paragraphs (c)(1) through (3) of this section.

(1) Documentation must be prepared that presents the information used as the basis for your knowledge of the material stream's average VOHAP concentration. Examples of information that may be used as the basis for knowledge include: material balances for the source(s) generating each material stream; species-specific chemical test data for the material stream from previous testing that are still applicable to the current material stream; test data for material from the contamination area(s) being remediated.

(2) If test data are used as the basis for knowledge, then you must document the test method, sampling protocol, and the means by which sampling variability and analytical variability are accounted for in the determination of the average VOHAP concentration. For example, you may use HAP concentration test data for the material stream that are validated according to Method 301 in 40 CFR part 63, appendix A as the basis for knowledge of the material. This information must be provided for each material stream where streams are combined.

(3) If you use species-specific chemical concentration test data as the basis for knowledge of the material, you may adjust the test data to the corresponding average VOHAP concentration value which would

be obtained had the material samples been analyzed using Method 305. To adjust these data, the measured concentration for each individual HAP chemical species contained in the material is multiplied by the appropriate species-specific adjustment factor (f_{m305}) listed in Table 1 of this subpart.

(d) In the event that you and us disagree on a determination using knowledge of the average total VOHAP concentration for a remediation material, then the results from a determination of VOHAP concentration using direct measurement by Method 305 in 40 CFR part 60 appendix A, as specified in paragraph (b) of this section, will be used to determine compliance with the applicable requirements of this subpart. We may perform or request that you perform this determination using direct measurement.

102. 63.7944 How do I determine the maximum HAP vapor pressure of my remediation material?

(a) You must determine the maximum HAP vapor pressure of your remediation material using either direct measurement as specified in paragraph (b) of this section or by knowledge as specified in paragraph (c) of this section.

(b) Direct measurement to determine the maximum HAP vapor pressure.

(1) Sampling. A sufficient number of samples must be collected to be representative of the remediation material contained in the tank. All samples must be collected and handled according to written procedures prepared by you and documented in a site sampling plan. This plan must describe the procedure by which representative samples of the remediation material are collected such that a minimum loss of organics occurs throughout the sample collection and handling process and by which sample integrity is maintained. A copy of the written sampling plan must be maintained on site in the facility site operating records. An example of an acceptable sampling plan includes a plan incorporating sample collection and handling procedures according to the guidance found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 or Method 25D in 40 CFR part 60, appendix A.

(2) Analysis. Any one of the following methods may be used to analyze the samples and compute the maximum HAP vapor pressure of the remediation material:

(i) Method 25E in 40 CFR part 60 appendix A;

(ii) Methods described in American Petroleum Institute Bulletin 2517, "Evaporation Loss from External Floating Roof Tanks,";

(iii) Methods obtained from standard reference texts;

(iv) ASTM Method 2879-83; or

(v) Any other method approved by the Administrator.

(c) Use of knowledge to determine the maximum HAP vapor pressure. Documentation must be prepared and recorded that presents the information used as the basis for your knowledge that the maximum HAP vapor pressure of the remediation material is less than the maximum vapor pressure limit listed in Table 2 of this subpart for the applicable tank design capacity category.

(d) In the event that you and us disagree on a determination using knowledge of the maximum HAP vapor pressure of the remediation material, then the results from a determination of maximum HAP vapor pressure using direct measurement by Method 25E in 40 CFR part 60 appendix A, as specified in paragraph (b) of this section, will be used to determine compliance with the applicable requirements of this subpart. We may perform or request that you perform this determination using direct measurement.

Continuous Monitoring Systems

103. 63.7945 What are my monitoring installation, operation, and maintenance requirements?

(a) Each CPMS must meet the requirements in paragraphs (a)(1) through (4) of this section.

(1) Complete a minimum of one cycle of operation for each successive 15-minute period.

(2) To calculate a valid hourly value, you must have at least three of four equally spaced data values (or at least two, if that condition is included to allow for periodic calibration checks) for that hour from a CPMS that is not out of control according to the monitoring plan referenced in §63.7935.

(3) To calculate the average emissions for each averaging period, you must have at least 75 percent of the hourly averages for that period using only block hourly average values that are based on valid data (i.e., not from out-of-control periods).

(4) Unless otherwise specified, each CPMS must determine the hourly average of all recorded readings and daily average, if required.

(b) You must record the results of each inspection, calibration, and validation check.

(c) You must conduct a performance evaluation for each CPMS according to the requirements in §63.8(e) and your site-specific monitoring plan.

104. 63.7946 How do I monitor and collect data to demonstrate continuous compliance?

(a) You must monitor and collect data according to this section and your site-specific monitoring plan required in §63.7935.

(b) Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) at all times that the affected source is operating.

(c) You may not use data recorded during monitoring malfunctions, associated repairs, out of control periods and required quality assurance or control activities in data averages and calculations used to report emissions or operating levels, nor may such data be used in fulfilling a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing the operation of the control device and associated control system.

105. 63.7947 What are my monitoring alternatives?

(a) As an alternative to the parametric monitoring required in this subpart, you may install, calibrate, and operate a continuous emission monitoring system (CEMS) to measure the control device outlet total organic emissions or organic HAP emissions concentration.

(1) The CEMS used on combustion control devices must include a diluent gas monitoring system (for O_2 or CO_2) with the pollutant monitoring system in order to correct for dilution (e.g., to 0 percent excess air).

(2) Each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. Data must be reduced as specified in §63.8(g)(2).

(3) You must conduct a performance evaluation of the CEMS according to according to the requirements in §63.8 and Performance Specification 8 (for a total organic emissions CEMS) or Performance Specification 9 (for a HAP emissions CEMS) and Performance Specification 3 (for an O_2 or CO_2 CEMS) of 40 CFR part 60, appendix B. The relative accuracy provision of Performance Specification 8, sections 2.4 and 3 need not be conducted.

(4) You must prepare a site-specific monitoring plan for operating, calibrating, and verifying the operation of your CEMS according to the requirements in §§63.8(c), (d), and (e).

(5) You must establish the emissions concentration operating limit according to paragraphs (a)(5)(i) and (ii) of this section.

(i) During the performance test, you must monitor and record the total organic or HAP emissions concentration at least once every 15 minutes during each of the three test runs.

(ii) Use the data collected during the performance test to calculate and record the average total organic or HAP emissions concentration maintained during the performance test. The average total organic or HAP

emissions concentration, corrected for dilution as appropriate, is the maximum operating limit for your control device.

(b) You must maintain the daily (24-hour) average total organic or HAP emissions concentration in the exhaust vent stream of the control device outlet less than or equal to the site-specific operating limit established during the performance test.

Notification, Reports, and Records

106. 63.7950 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.7(b) and (c), 63.8(e), 63.8(f)(4) and (6), and 63.9(b) through (h) that apply to you.

(b) As specified in §63.9(b)(2), if you start up your affected source before [INSERT DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER], you must submit an Initial Notification not later than 120 calendar days after [INSERT DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER].

(c) As specified in §63.9(b)(3), if you start up your new or reconstructed affected source on or after the effective date, you must submit an Initial Notification no later than 120 calendar days after initial startup.

(d) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in §63.7(b)(1).

(e) If you are required to conduct a performance test, design evaluation, or other initial compliance demonstration, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii).

(1) For each initial compliance demonstration that includes a performance test or design evaluation, you must submit the Notification of Compliance Status, including the performance test results, before the close of

business on the 60th calendar day following the completion of the performance test according to §63.10(d)(2). You must submit the complete design evaluation and supporting documentation.

(2) For each initial compliance demonstration that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th calendar day following the completion of the initial compliance demonstration.

(f) You must provide written notification to the Administrator of the alternative standard selected under §63.1006(b)(5) or (6) before implementing either of the provisions.

107. 63.7951 What reports must I submit and when?

(a) Compliance report due dates. Unless the Administrator has approved a different schedule, you must submit a semiannual compliance report to your permitting authority according to the requirements specified in paragraphs (a)(1) through (5) of this section.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.7883 and ending on June 30 or December 31, whichever date comes first after the compliance date that is specified for your affected source.

(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after your first compliance report is due.

(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.

(4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after the end of the semiannual reporting period.

(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to

40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of the dates specified in paragraphs (a)(1) through (4) of this section.

(b) Compliance report contents. Each compliance report must include the information specified in paragraphs (b)(1) through (3) of this section and, as applicable, paragraphs (b)(4) through (9) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a startup, shutdown, or malfunction during the reporting period and you took action consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i).

(5) If there were no deviations from any emissions limitations (including operating limit), work practice standards, or operation and maintenance requirements, a statement that there were no deviations from the emissions limitations, work practice standards, or operation and maintenance requirements during the reporting period.

(6) If there were no periods during which a continuous monitoring system (including a CPMS or CEMS) was out-of-control as specified by §63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period.

(7) For each deviation from an emissions limitation (including an operating limit) that occurs at an affected source for which you are not using a continuous monitoring system (including a CPMS or CEMS) to comply with an emissions limitation or work practice standard required in this subpart, the compliance report

must contain the information specified in paragraphs (b)(1) through (4) and (b)(7)(i) and (ii) of this section. This requirement includes periods of startup, shutdown, and malfunction.

(i) The total operating time of each affected source during the reporting period.

(ii) Information on the number, duration, and cause of deviations (including unknown cause) as applicable and the corrective action taken.

(8) For each deviation from an emissions limitation (including an operating limit) or work practice standard occurring at an affected source where you are using a continuous monitoring system (including a CPMS or CEMS) to comply with the emissions limitations or work practice standard in this subpart, you must include the information specified in paragraphs (b)(1) through (4) and (b)(8)(i) through (xi) of this section. This requirement includes periods of startup, shutdown, and malfunction.

(i) The date and time that each malfunction started and stopped.

(ii) The date and time that each continuous monitoring system was inoperative, except for zero (low-level) and high-level checks.

(iii) The date, time, and duration that each continuous monitoring system was out-of-control, including the information in §63.8(c)(8).

(iv) 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.

(v) A summary of the total duration of the deviations during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(vi) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and unknown causes.

(vii) A summary of the total duration of continuous monitoring system downtime during the reporting period and the total duration of continuous monitoring system downtime as a percent of the total source operating time during the reporting period.

(viii) A brief description of the process units.

(ix) A brief description of the continuous monitoring system.

(x) The date of the latest continuous monitoring system certification or audit.

(xi) A description of any changes in continuous monitoring systems, processes, or controls since the last reporting period.

(9) You must include the information on equipment leaks required in periodic reports by §63.1018(a) or §63.1039(b).

(c) Immediate startup, shutdown, and malfunction report. If you had a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with your startup, shutdown, and malfunction plan, you must submit an immediate startup, shutdown, and malfunction report according to the requirements of §63.10(d)(5)(ii) .

(d) Part 70 monitoring report. If you have obtained a title V operating permit for an affected source pursuant to 40 CFR part 70 or 40 CFR part 71, you must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If you submit a compliance report for an affected source along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all the required information concerning deviations from any emissions limitation or operation and maintenance requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any

obligation you may have to report deviations from permit requirements for an affected source to your permitting authority.

108. 63.7952 What records must I keep?

(a) You must keep the records specified in paragraphs (a)(1) through (4) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirements in §63.10(b)(1) and (b)(2)(xiv).

(2) The records in §63.6(e)(3)(iii) through (v) related to startups, shutdowns, and malfunctions.

(3) Results of performance tests and performance evaluations as required by §63.10(b)(2)(viii).

(4) The records of initial and ongoing determinations for affected sources that are exempt from control requirements under this subpart.

(b) For each continuous monitoring system, you must keep the records as described in paragraphs (b)(1) and (2) of this section.

(1) Records described in §63.10(b)(2)(vi) through (xi) that apply to your continuous monitoring system.

(2) Performance evaluation plans, including previous (i.e., superseded) versions of the plan as required in §63.8(d)(3).

(c) You must keep the records required by this subpart to show continuous compliance with each emissions limitation, work practice standard, and operation and maintenance requirement that applies to you.

(d) You must record, on a semiannual basis, the information in §63.696(g) for planned routine maintenance of a control device for emissions from process vents.

109. 63.7953 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep your files of all information (including all reports and notifications) for 5 years following the date of each occurrence, measurement, maintenance, action taken to correct the cause of a deviation, report, or record.

(c) You 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 §63.10(b)(1). You can keep the records off-site for the remaining 3 years.

(d) If, after the remediation activity is completed, there is no other remediation activity at the facility, and you are no longer the owner of the facility, you may keep all records for the completed remediation activity at an off-site location provided you notify the Administrator in writing of the name, address and contact person for the off-site location.

Other Requirements and Information

110. 63.7955 What parts of the General Provisions apply to me?

Table 3 of this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

111. 63.7956 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the EPA, or a delegated authority such as your State, local, or tribal agency. If the EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency, in addition to the EPA, has the authority to implement and enforce this subpart. You should contact your EPA Regional Office (see list in §63.13) to find out if this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under section 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the Administrator of EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that cannot be delegated to State, local, or tribal agencies are listed in paragraphs (a)(1) through (4) of this section.

(1) Approval of alternatives to the non-opacity emissions limitations and work practice standards in this subpart under §63.6(g).

(2) Approval of major changes to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.

(3) Approval of major changes to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major changes to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

112. 63.7957 What definitions apply to this subpart?

Terms used in this subpart are defined in the CAA, in §63.2, and in this section. If a term is defined both in this section and in another subpart cross-referenced by this subpart, then the term will have the meaning given in this section for purposes of this subpart.

Boiler means an enclosed combustion device that extracts useful energy in the form of steam and is not an incinerator or a process heater.

Closed vent system means a system that is not open to the atmosphere and is composed of hard-piping, ductwork, connections, and, if necessary, fans, blowers, or other flow-inducing device that conveys gas or vapor from an emissions point to a control device.

Closure device means a cap, hatch, lid, plug, seal, valve, or other type of fitting that prevents or reduces air pollutant emissions to the atmosphere by blocking an opening in a cover when the device is secured in the closed position. Closure devices include devices that are detachable from the cover (e.g., a sampling port cap),

manually operated (e.g., a hinged access lid or hatch), or automatically operated (e.g., a spring-loaded pressure relief valve).

Container means a portable unit used to hold material. Examples of containers include, but are not limited to drums, dumpsters, roll-off boxes, bulk cargo containers commonly known as portable tanks or totes, cargo tank trucks, dump trucks, and rail cars. For the purpose of this subpart, a front-end loader, excavator, backhoe, or other type of self-propelled excavation equipment is not a container.

Continuous record means documentation of data values measured at least once every 15 minutes and recorded at the frequency specified in this subpart.

Continuous recorder means a data recording device that either records an instantaneous data value at least once every 15 minutes or records 15-minutes or more frequent block averages.

Control device means equipment used recovering, removing, oxidizing, or destroying organic vapors. Examples of such equipment include but are not limited to carbon adsorbers, condensers, vapor incinerators, flares, boilers, and process heaters.

Cover means a device that prevents or reduces air pollutant emissions to the atmosphere by forming a continuous barrier over the remediation material managed in a unit. A cover may have openings (such as access hatches, sampling ports, gauge wells) that are necessary for operation, inspection, maintenance, and repair of the unit on which the cover is used. A cover may be a separate piece of equipment which can be detached and removed from the unit (such as a tarp) or a cover may be formed by structural features permanently integrated into the design of the unit.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) fails to meet any requirement or obligation established by this subpart, including but not limited to any emissions limitation (including any operating limit), or work practice standard;

(2) fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) fails to meet any emissions limitation,(including any operating limit), or work practice standard in this subpart during startup, shutdown, or malfunction, regardless or whether or not such failure is permitted by this subpart.

Emissions limitation means any emissions limit, opacity limit, operating limit, or visible emissions limit.

Emissions point means an individual tank, surface impoundment, container, oil-water, organic-water separator, transfer system, vent, or enclosure.

Enclosure means a structure that surrounds a tank or container, captures organic vapors emitted from the tank or container, and vents the captured vapor through a closed vent system to a control device.

Equipment means each pump, pressure relief device, sampling connection system, valve, and connector used in remediation material service at a facility.

External floating roof means a pontoon-type or double-deck type cover that rests on the liquid surface in a tank with no fixed roof.

Facility means all contiguous or adjoining property that is under common control including properties that are separated only by a road or other public right-of-way. Common control includes properties that are owned, leased, or operated by the same entity, parent entity, subsidiary, or any combination thereof. A unit or group of units within a contiguous property that are not under common control (e.g., a wastewater treatment unit located at the facility but is owned by a different company) is a different facility.

Fixed roof means a cover that is mounted on a unit in a stationary position and does not move with fluctuations in the level of the liquid managed in the unit.

Flame zone means the portion of the combustion chamber in a boiler or process heater occupied by the flame envelope.

Floating roof means a cover consisting of a double deck, pontoon single deck, or internal floating cover which rests upon and is supported by the liquid being contained, and is equipped with a continuous seal.

Flow indicator means a device that indicates whether gas is flowing, or whether the valve position would allow gas to flow in a bypass line.

Hard-piping means pipe or tubing that is manufactured and properly installed according to relevant standards and good engineering practices.

Individual drain system means a stationary system used to convey wastewater streams or residuals to a remediation material management unit or to discharge or disposal. The term includes hard-piping, all drains and junction boxes, together with their associated sewer lines and other junction boxes (e.g., manholes, sumps, and lift stations) conveying wastewater streams or residuals. For the purpose of this subpart, an individual drain system is not a drain and collection system that is designed and operated for the sole purpose of collecting rainfall runoff (e.g., stormwater sewer system) and is segregated from all other individual drain systems.

Internal floating roof means a cover that rests or floats on the liquid surface (but not necessarily in complete contact with it inside a tank that has a fixed roof).

Maximum HAP vapor pressure means the sum of the individual HAP equilibrium partial pressure exerted by remediation material at the temperature equal to either: the monthly average temperature as reported by the National Weather Service when the remediation material is stored or treated at ambient temperature; or the highest calendar-month average temperature of the remediation material when the remediation material is

stored at temperatures above the ambient temperature or when the remediation material is stored or treated at temperatures below the ambient temperature. For the purpose of this subpart, maximum HAP vapor pressure is determined using the procedures specified in §63.7944.

No detectable organic emissions means no escape of organics to the atmosphere as determined using the procedure specified in §63.694(k).

Oil-water separator means a separator as defined for this subpart that is used to separate oil from water.

Operating parameter value means a minimum or maximum value established for a control device or treatment process parameter which, if achieved by itself or in combination with one or more other operating parameter values, determines that an owner or operator has complied with an applicable emissions limitation or standard.

Organic-water separator means a separator as defined for this subpart that is used to separate organics from water.

Point-of-extraction means a point above ground where you can collect samples of a remediation material before or at the first point where organic constituents in the material have the potential to volatilize and be released to the atmosphere and before placing the material in a remediation material management unit or treatment process. For the purpose this subpart, the first point where the organic constituents in the remediation material have the potential to volatilize and be released to the atmosphere is not a fugitive emissions point due to an equipment leak from any of the following equipment components: pumps, compressors, valves, connectors, instrumentation systems, or safety devices.

Process heater means an enclosed combustion device that transfers heat released by burning fuel directly to process streams or to heat transfer liquids other than water.

Process vent means any open-ended pipe, stack, duct, or other opening intended to allow the passage of gases, vapors, or fumes to the atmosphere and this passage is caused by mechanical means (such as compressors, vacuum-producing systems or fans) or by process-related means (such as volatilization produced by heating). For the purposes of this subpart, a process vent is neither a safety device (as defined in this section) nor a stack, duct or other opening used to exhaust combustion products from a boiler, furnace, heater, incinerator, or other combustion device.

Radioactive mixed waste means a material that contains both hazardous waste subject to RCRA and source, special nuclear, or by-product material subject to the Atomic Energy Act of 1954.

Remediation material means a material that contains one or more of the HAP listed in Table 1 of this subpart, and this material is one of the following:

(1) A material found in naturally occurring media such as soil, groundwater, surface water, sediments, or a mixture of such materials with liquids, sludges, or solids which is inseparable by simple mechanical removal processes and is made up primarily of media. This material does not include debris as defined in 40 CFR 268.2.

(2) A material found in intact or substantially intact containers, tanks, storage piles, or other storage units that requires clean up because this material poses a reasonable potential threat to contaminating media. Examples of these materials include, but are not limited to, solvents, oils, paints, and other volatile or semi-volatile organic liquids found in buried drums, cans, or other containers; gasoline, fuel oil, or other fuels in leaking underground storage tanks; and solid materials containing volatile or semi-volatile organics in unused or abandoned piles. Remediation material is not a waste or residue generated by routine equipment maintenance activities performed at a facility such as, but not limited to, tank bottoms and sludges removed during tank cleanouts; sludges and sediments removed from active wastewater treatment tanks, surface impoundments, or

lagoons; spent catalyst removed from process equipment; residues removed from air pollution control equipment; and debris removed during heat exchanger and pipeline cleanouts.

Remediation material management unit means a tank, container, surface impoundment, oil-water separator, organic-water separator, or transfer system used to remove, destroy, degrade, transform, immobilize, or otherwise manage remediation material.

Remediation material service means any time when a pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, or instrumentation system contains or contacts remediation material.

Responsible official means responsible official as defined in 40 CFR 70.2.

Safety device means a closure device such as a pressure relief valve, frangible disc, fusible plug, or any other type of device which functions to prevent physical damage or permanent deformation to equipment by venting gases or vapors during unsafe conditions resulting from an unplanned, accidental, or emergency event. For the purpose of this subpart, a safety device is not used for routine venting of gases or vapors from the vapor headspace underneath a cover such as during filling of the unit or to adjust the pressure in this vapor headspace in response to normal daily diurnal ambient temperature fluctuations. A safety device is designed to remain in a closed position during normal operations and open only when the internal pressure, or another relevant parameter, exceeds the device threshold setting applicable to the equipment as determined by the owner or operator based on manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, combustible, explosive, reactive, or hazardous materials.

Separator means a remediation material management unit, generally a tank, used to separate oil or organics from water. A separator consists of not only the separation unit but also the forebay and other

separator basins, skimmers, weirs, grit chambers, sludge hoppers, and bar screens that are located directly after the individual drain system and prior to any additional treatment units such as an air flotation unit clarifier or biological treatment unit. Examples of a separator include, but are not limited to, an API separator, parallel-plate interceptor, and corrugated-plate interceptor with the associated ancillary equipment.

Site remediation means one or more activities or processes used to remove, destroy, degrade, transform, immobilize, or otherwise manage remediation material. The monitoring or measuring of contamination levels in environmental media using wells or by sampling is not considered to be a site remediation.

Sludge means sludge as defined in §260.10 of this chapter.

Soil means unconsolidated earth material composing the superficial geologic strata (material overlying bedrock), consisting of clay, silt, sand, or gravel size particles (sizes as classified by the U.S. Soil Conservation Service), or a mixture of such materials with liquids, sludges, or solids which is inseparable by simple mechanical removal processes and is made up primarily of soil.

Stabilization process means any physical or chemical process used to either reduce the mobility of contaminants in media or eliminate free liquids as determined by Test Method 9095 - Paint Filter Liquids Test in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846, Third Edition, September 1986, as amended by Update I, November 15, 1992. (As an alternative, you may use any more recent, updated version of Method 9095 approved by the EPA). A stabilization process includes mixing remediation material with binders or other materials, and curing the resulting remediation material and binder mixture. Other synonymous terms used to refer to this process are fixation or solidification. A stabilization process does not include the adding of absorbent materials to the surface of remediation material, without mixing, agitation, or subsequent curing, to absorb free liquid.

Surface impoundment means a unit that is a natural topographical depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials), which is designed to hold an accumulation of liquids. Examples of surface impoundments include holding, storage, settling, and aeration pits, ponds, and lagoons.

Tank means a stationary unit that is constructed primarily of nonearthen materials (such as wood, concrete, steel, fiberglass, or plastic) which provide structural support and is designed to hold an accumulation of liquids or other materials.

Temperature monitoring device means a piece of equipment used to monitor temperature and having an accuracy of ±1 percent of the temperature being monitored expressed in degrees Celsius (°C) or ±1.2 degrees °C, whichever value is greater.

Transfer system means a stationary system for which the predominant function is to convey liquids or solid materials from one point to another point within waste management operation or recovery operation. For the purpose of this subpart, the conveyance of material using a container (as defined of this subpart) or self-propelled vehicle (e.g., a front-end loader) is not a transfer system. Examples of a transfer system include but are not limited to a pipeline, an individual drain system, a gravity-operated conveyor (such as a chute), and a mechanically-powered conveyor (such as a belt or screw conveyor).

Treatment process means a process in which remediation material is physically, chemically, thermally, or biologically treated to destroy, degrade, or remove hazardous air pollutants contained in the material. A treatment process can be composed of a single unit (e.g., a steam stripper) or a series of units (e.g., a wastewater treatment system). A treatment process can be used to treat one or more remediation material streams at the same time.

Volatile organic hazardous air pollutant (VOHAP) concentration means the fraction by weight of the HAP listed in Table 1 of this subpart that are contained in the remediation material as measured using Method 305, 40 CFR part 63, appendix A and expressed in terms of parts per million (ppm). As an alternative to using Method 305, 40 CFR part 63, appendix A, you may determine the HAP concentration of the remediation material using any one of the other test methods specified in §63.694(b)(2)(ii). When a test method specified in §63.694(b)(2)(ii) other than Method 305 in 40 CFR part 63, appendix A is used to determine the speciated HAP concentration of the contaminated material, the individual compound concentration may be adjusted by the corresponding f_{m305} listed in Table 1 of this subpart to determine a VOHAP concentration.

Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the CAA.

Tables to Subpart GGGGG of Part 63

113. Table 1 to Subpart GGGGG of Part 63-- List of Hazardous Air Pollutants

CAS No.[a]	Compound Name	$f_{m\ 305}$
75070	Acetaldehyde	1.000
75058	Acetonitrile	0.989
98862	Acetophenone	0.314
107028	Acrolein	1.000
107131	Acrylonitrile	0.999
107051	Allyl chloride	1.000
71432	Benzene (includes benzene in gasoline)	1.000
98077	Benzotrichloride (isomers and mixture)	0.958
100447	Benzyl chloride	1.000
92524	Biphenyl	0.864
542881	Bis(chloromethyl)ether[b]	0.999
75252	Bromoform	0.998
106990	1,3-Butadiene	1.000
75150	Carbon disulfide	1.000
56235	Carbon Tetrachloride	1.000
43581	Carbonyl sulfide	1.000
133904	Chloramben	0.633
108907	Chlorobenzene	1.000
67663	Chloroform	1.000
107302	Chloromethyl methyl ether[b]	1.000
126998	Chloroprene	1.000
98828	Cumene	1.000
94757	2,4-D, salts and esters	0.167
334883	Diazomethane[c]	0.999

132649	Dibenzofurans	0.967
96128	1,2-Dibromo-3-chloropropane	1.000
106467	1,4-Dichlorobenzene(p)	1.000
107062	Dichloroethane (Ethylene dichloride)	1.000
111444	Dichloroethyl ether (Bis(2-chloroethyl ether)	0.757
542756	1,3-Dichloropropene	1.000
79447	Dimethyl carbamoyl chloride[c]	0.150
57147	1,1-Dimethyl hydrazine	
64675	Diethyl sulfate	0.0025
77781	Dimethyl sulfate	0.086
121697	N,N-Dimethylaniline	0.0008
51285	2,4-Dinitrophenol	0.0077
121142	2,4-Dinitrotoluene	0.0848
123911	1,4-Dioxane (1,4-Diethyleneoxide)	0.869
106898	Epichlorohydrin (1-Chloro-2,3-epoxypropane)	0.939
106887	1,2-Epoxybutane	1.000
140885	Ethyl acrylate	1.000
100414	Ethyl benzene	1.000
75003	Ethyl chloride (Chloroethane)	1.000
106934	Ethylene dibromide (Dibromoethane)	0.999
107062	Ethylene dichloride (1,2-Dichloroethane)	1.000
151564	Ethylene imine (Aziridine)	0.867
75218	Ethylene oxide	1.000
75343	Ethylidene dichloride (1,1-Dichloroethane)	1.000
	Glycol ethers[d] that have a Henry's Law constant value equal to or greater than 0.1 Y/X(1.8 X 10^{-6} atm/gm-mole/m^3) at 25°C	[e]

118741	Hexachlorobenzene	0.97
87683	Hexachlorobutadiene	0.88
67721	Hexachloroethane	0.499
110543	Hexane	1.000
78591	Isophorone	0.506
58899	Lindane (all isomers)	1.000
67561	Methanol	0.855
74839	Methyl bromide (Bromomethane)	1.000
74873	Methyl chloride (Choromethane)	1.000
71556	Methyl chloroform (1,1,1-Trichloroethane)	1.000
78933	Methyl ethyl ketone (2-Butanone)	0.990
74884	Methyl iodide (Iodomethane)	1.000
108101	Methyl isobutyl ketone (Hexone)	0.979
624839	Methyl isocyanate	1.000
80626	Methyl methacrylate	0.999
1634044	Methyl tert butyl ether	1.000
75092	Methylene chloride (Dichloromethane)	1.000
91203	Naphthalene	0.994
98953	Nitrobenzene	0.394
79469	2-Nitropropane	0.989
82688	Pentachloronitrobenzene (Quintobenzene)	0.839
87865	Pentachlorophenol	0.0898
75445	Phosgene[c]	1.000
123386	Propionaldehyde	0.999
78875	Propylene dichloride (1,2-Dichloropropane)	1.000
75569	Propylene oxide	1.000
75558	1,2-Propylenimine (2-Methyl aziridine)	0.945
100425	Styrene	1.000

96093	Styrene oxide	0.830
79345	1,1,2,2-Tetrachloroethane	0.999
127184	Tetrachloroethylene (Perchloroethylene)	1.000
108883	Toluene	1.000
95534	o-Toluidine	0.152
120821	1,2,4-Trichlorobenzene	1.000
71556	1,1,1-Trichloroethane (Methyl chlorform)	1.000
79005	1,1,2-Trichloroethane (Vinyl trichloride)	1.000
79016	Trichloroethylene	1.000
95954	2,4,5-Trichlorophenol	0.108
88062	2,4,6-Trichlorophenol	0.132
121448	Triethylamine	1.000
540841	2,2,4-Trimethylpentane	1.000
108054	Vinyl acetate	1.000
593602	Vinyl bromide	1.000
75014	Vinyl chloride	1.000
75354	Vinylidene chloride (1,1-Dichloroethylene)	1.000
1330207	Xylenes (isomers and mixture)	1.000
95476	o-Xylenes	1.000
108383	m-Xylenes	1.000
106423	p-Xylenes	1.000

Notes:

21. $f_{m\ 305}$ = Fraction measure factor in Method 305, 40 CFR part 63, appendix A.

[a] CAS numbers refer to the Chemical Abstracts Services registry number assigned to specific compounds, isomers, or mixtures of compounds.

[b] Denotes a HAP that hydrolyzes quickly in water, but the hydrolysis products are also HAP chemicals.

[c] Denotes a HAP that may react violently with water.

[d] Denotes a HAP that hydrolyzes slowly in water.

[e] The $f_{m\ 305}$ factors for some of the more common glycol ethers can be obtained by contacting the Waste and Chemical Processes Group, Office

of Air Quality Planning and Standards, Research Triangle Park, NC 27711.

114. Table 2 to Subpart GGGGG of Part 63-- Control Levels as Required by §63.7895(a) for Tanks Managing Remediation Material with a Maximum HAP Vapor Pressure Less Than 76.6 kPa

If your tank design capacity is ...	And the maximum HAP vapor pressure of the remediation material placed in your tank is ...	Then your tank must use ...
1. less than 38 m^3	less than 76.6 kPa	Tank Level 1 controls under §63.7895(b)
2. at least 38 m^3 but less than 151 m^3	less than 13.1 kPa	Tank Level 1 controls under §63.7895(b)
3. 151 m^3 or greater	less than 0.7 kPa	Tank Level 1 controls under §63.7895(b)
4. at least 38 m^3 but less than 151 m^3	13.1 kPa or greater	Tank Level 2 controls under §63.7895(c)
5. 151 m^3 or greater	0.7 kPa or greater	Tank Level 2 controls under §63.7895(c)

As stated in §63.7940, you must comply with the applicable General Provisions requirements according to the following table:

115. Table 3 to Subpart GGGGG of Part 63--Applicability of General Provisions to Subpart GGGGG

Citation	Subject	Brief Description	Applies to subpart GGGGG
§63.1	Applicability	Initial Applicability Determination; Applicability After Standard Established; Permit Requirements; Extensions, Notifications	Yes
§63.2	Definitions	Definitions for part 63 standards	Yes
§63.3	Units and Abbreviations	Units and abbreviations for part 63 standards	Yes
§63.4	Prohibited Activities	Prohibited Activities; Compliance date; Circumvention, Severability	Yes
§63.5	Construction/ Reconstruction	Applicability; applications; approvals	Yes
§63.6(a)	Applicability	General Provisions (GP) apply unless compliance extension GP apply to area sources that become major	Yes
§63.6(b)(1)-(4)	Compliance Dates for New and Reconstructed sources	Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for 112(f)	Yes
§63.6(b)(5)	Notification	Must notify if commenced construction or reconstruction after proposal	Yes
§63.6(b)(6)	[Reserved]		

§63.6(b)(7)	Compliance Dates for New and Reconstructed Area Sources That Become Major	Area sources that become major must comply with major source standards immediately upon becoming major, regardless of whether required to comply when they were an area source	Yes
§63.6(c)(1)-(2)	Compliance Dates for Existing Sources	Comply according to date in subpart, which must be no later than 3 years after effective date For 112(f) standards, comply within 90 days of effective date unless compliance extension	Yes
§63.6(c)(3)-(4)	[Reserved]		
§63.6(c)(5)	Compliance Dates for Existing Area Sources That Become Major	Area sources that become major must comply with major source standards by date indicated in subpart or by equivalent time period (for example, 3 years)	Yes
§63.6(d)	[Reserved]		
§63.6(e)(1)-(2)	Operation & Maintenance	Operate to minimize emissions at all times Correct malfunctions as soon as practicable Operation and maintenance requirements independently enforceable; information Administrator will use to determine if operation and maintenance requirements were met	Yes
§63.6(e)(3)	Startup, Shutdown, and Malfunction Plan (SSMP)	Requirement for startup, shutdown and malfunction (SSM) and SSMP Content of SSMP	Yes with the exception of containers using either Level 1 or Level 2 controls.

§63.6(f)(1)	Compliance Except During SSM	You must comply with emissions standards at all times except during SSM	Yes
§63.6(f)(2)-(3)	Methods for Determining Compliance	Compliance based on performance test, operation and maintenance plans, records, inspection	Yes
§63.6(g)(1)-(3)	Alternative Standard	Procedures for getting an alternative standard	Yes
§63.6(h)	Opacity/Visible Emissions (VE) Standards	Requirements for opacity and visible emissions limits	No. no opacity standards.
§63.6(i)(1)-(14)	Compliance Extension	Procedures and criteria for Administrator to grant compliance extension	Yes
§63.6(j)	Presidential Compliance Exemption	President may exempt source category from requirement to comply with final rule.	Yes
§63.7(a)(1)-(2)	Performance Test Dates	Dates for Conducting Initial Performance Testing and Other Compliance Demonstrations. Must conduct 180 days after first subject to final rule.	Yes
§63.7(a)(3)	CAA Section 114 Authority	Administrator may require a performance test under CAA section 114 at any time.	Yes
§63.7(b)(1)	Notification of Performance Test	Must notify Administrator 60 days before the test.	Yes
§63.7(b)(2)	Notification of Rescheduling	If rescheduling a performance test is necessary, must notify Administrator 5 days before scheduled date of rescheduled date.	Yes

§63.7(c)	Quality Assurance/Test Plan	Requirement to submit site-specific test plan 60 days before the test or on date Administrator agrees with: Test plan approval procedures Performance audit requirements Internal and External QA procedures for testing	Yes
§63.7(d)	Testing Facilities	Requirements for testing facilities	Yes
§63.7(e)(1)	Conditions for Conducting Performance Tests	Performance tests must be conducted under representative conditions. Cannot conduct performance tests during SSM. Not a violation to exceed standard during SSM.	Yes
§63.7(e)(2)	Conditions for Conducting Performance Tests	Must conduct according to rule and EPA test methods unless Administrator approves alternative.	Yes
§63.7(e)(3)	Test Run Duration	Must have three test runs of at least one hour each. Compliance is based on arithmetic mean of three runs. Conditions when data from an additional test run can be used.	Yes
§63.7(f)	Alternative Test Method	Procedures by which Administrator can grant approval to use an alternative test method.	Yes

§63.7(g)	Performance Test Data Analysis	Must include raw data in performance test report. Must submit performance test data 60 days after end of test with the Notification of Compliance Status. Keep data for 5 years.	Yes
§63.7(h)	Waiver of Tests	Procedures for Administrator to waive performance test	Yes
§63.8(a)(1)	Applicability of Monitoring Requirements	Subject to all monitoring requirements in standard	Yes
§63.8(a)(2)	Performance Specifications	Performance Specifications in appendix B of part 60 apply	Yes
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring with Flares	Unless your rule says otherwise, the requirements for flares in 63.11 apply.	Yes
§63.8(b)(1)	Monitoring	Must conduct monitoring according to standard unless Administrator approves alternative.	Yes
§63.8(b)(2)-(3)	Multiple Effluents and Multiple Monitoring Systems	Specific requirements for installing monitoring systems Must install on each effluent before it is combined and before it is released to the atmosphere unless Administrator approves otherwise. If more than one monitoring system on an emissions point, must report all monitoring system results, unless one monitoring system is a backup.	Yes

§63.8(c)(1)	Monitoring System Operation and Maintenance	Maintain monitoring system in a manner consistent with good air pollution control practices.	Yes
§63.8(c)(1)(i)	Routine and Predictable SSM	Follow the SSM plan for routine repairs. Keep parts for routine repairs readily available. Reporting requirements for SSM when action is described in SSM plan.	Yes
§63.8(c)(1)(ii)	SSM not in SSMP	Reporting requirements for SSM when action is not described in SSM plan.	Yes
§63.8(c)(1)(iii)	Compliance with Operation and Maintenance (O&M) Requirements	How Administrator determines if source complying with operation and maintenance requirements. Review of source O&M procedures, records, Manufacturer's instructions, recommendations, and inspection of monitoring system	Yes
§63.8(c)(2)-(3)	Monitoring System Installation	Must install to get representative emissions and parameter measurements. Must verify operational status before or at performance test.	Yes
§63.8(c)(4)	Continuous Monitoring System (CMS) Requirements	CMS must be operating except during breakdown, out-of-control, repair, maintenance, and high-level calibration drifts.	No

§63.8(c)(4)(i)-(ii)	Continuous Monitoring System (CMS) Requirements	COMS must have a minimum of one cycle of sampling and analysis for each successive 10-second period and one cycle of data recording for each successive 6-minute period. CEMS must have a minimum of one cycle of operation for each successive 15-minute period.	Yes. However, COMS are not applicable. Requirements for CPMS are listed in §§63.7900 and 63.7913.
§63.8(c)(5)	COMS Minimum Procedures	COMS minimum procedures	No
§63.8(c)(6)	CMS Requirements	Zero and High level calibration check requirements	Yes. However requirements for CPMS are addressed in §§63.7900 and 63.7913.
§63.8(c)(7)-(8)	CMS Requirements	Out-of-control periods, including reporting	Yes
§63.8(d)	CMS Quality Control	Requirements for CMS quality control, including calibration, etc. Must keep quality control plan on record for 5 years. Keep old versions for 5 years after revisions.	Yes
§63.8(e)	CMS Performance Evaluation	Notification, performance evaluation test plan, reports	Yes
§63.8(f)(1)-(5)	Alternative Monitoring Method	Procedures for Administrator to approve alternative monitoring	Yes
§63.8(f)(6)	Alternative to Relative Accuracy Test	Procedures for Administrator to approve alternative relative accuracy tests for CEMS	No

§63.8(g)(1)-(4)	Data Reduction	COMS 6-minute averages calculated over at least 36 evenly spaced data points. CEMS 1-hour averages computed over at least four equally spaced data points.	Yes. However, COMS are not applicable. Requirements for CPMS are addressed in §§63.7900 and 63.7913.
§63.8(g)(5)	Data Reduction	Data that cannot be used in computing averages for CEMS and COMS.	No
§63.9(a)	Notification Requirements	Applicability and State Delegation	Yes
§63.9(b)(1)-(5)	Initial Notifications	Submit notification 120 days after effective date. Notification of intent to construct/ reconstruct; Notification of commencement of construct/ reconstruct; Notification of startup Contents of each	Yes
§63.9(c)	Request for Compliance Extension	Can request if cannot comply by date or if installed BACT/LAER	Yes
§63.9(d)	Notification of Special Compliance Requirements for New Source	For sources that commence construction between proposal and promulgation and want to comply 3 years after effective date	Yes
§63.9(e)	Notification of Performance Test	Notify Administrator 60 days prior	Yes
§63.9(f)	Notification of VE/Opacity Test	Notify Administrator 30 days prior	No

§63.9(g)	Additional Notifications When Using CMS	Notification of performance evaluation Notification using COMS data Notification that exceeded criterion for relative accuracy	Yes. However, there are no opacity standards.
§63.9(h)(1)-(6)	Notification of Compliance Status	Contents Due 60 days after end of performance test or other compliance demonstration, except for opacity/VE, which are due 30 days after. When to submit to Federal vs. State authority	Yes
§63.9(i)	Adjustment of Submittal Deadlines	Procedures for Administrator to approve change in when notifications must be submitted	Yes
§63.9(j)	Change in Previous Information	Must submit within 15 days after the change	Yes
§63.10(a)	Recordkeeping/ Reporting	Applies to all, unless compliance extension When to submit to Federal vs. State authority Procedures for owners of more than 1 source	Yes
§63.10(b)(1)	Recordkeeping/ Reporting	General Requirements Keep all records readily available Keep for 5 years	Yes

§63.10(b)(2)(i)-(iv)	Records related to SSM	Occurrence of each of operation (process equipment) Occurrence of each malfunction of air pollution equipment Maintenance on air pollution control equipment Actions during startup, shutdown, and malfunction	Yes
§63.10(b)(2)(vi) and (x - xi)	CMS Records	Malfunctions, inoperative, out-of-control Calibration checks Adjustments, maintenance	Yes
§63.10(b)(2)(vii)-(ix)	Records	Measurements to demonstrate compliance with emissions limitations Performance test, performance evaluation, and visible emissions observation results Measurements to determine conditions of performance tests and performance evaluations.	Yes
§63.10(b)(2)(xii)	Records	Records when under waiver	Yes
§63.10(b)(2)(xiii)	Records	Records when using alternative to relative accuracy test	No
§63.10(b)(2)(xiv)	Records	All documentation supporting Initial Notification and Notification of Compliance Status	Yes
§63.10(b)(3)	Records	Applicability Determinations	Yes

§63.10(c)	Records	Additional Records for CMS	No
§63.10(d)(1)	General Reporting Requirements	Requirement to report	Yes
§63.10(d)(2)	Report of Performance Test Results	When to submit to Federal or State authority	Yes
§63.10(d)(3)	Reporting Opacity or VE Observations	What to report and when	No
§63.10(d)(4)	Progress Reports	Must submit progress reports on schedule if under compliance extension	Yes
§63.10(d)(5)	Startup, Shutdown, and Malfunction Reports	Contents and submission	Yes
§63.10(e)(1)-(2)	Additional CMS Reports	Must report results for each CEM on a unit Written copy of performance evaluation Three copies of COMS performance evaluation	Yes. However, COMS are not applicable
§63.10(e)(3)	Reports	Excess Emissions Reports	No
§63.10(e)(3)(i-iii)	Reports	Schedule for reporting excess emissions and parameter monitor exceedance (now defined as deviations)	No

§63.10(e)(3)(iv-v)	Excess Emissions Reports	Requirement to revert to quarterly submission if there is an excess emissions and parameter monitor exceedance (now defined as deviations) Provision to request semiannual reporting after compliance for one year Submit report by 30th day following end of quarter or calendar half If there has not been an exceedance or excess emissions (now defined as deviations), report contents is a statement that there have been no deviations	No
§63.10(e)(3)(iv-v)	Excess Emissions Reports	Must submit report containing all of the information in §§63.10(c)(5-13) and 63.8(c)(7-8)	No
§63.10(e)(3)(vi-viii)	Excess Emissions Report and Summary Report	Requirements for reporting excess emissions for CMSs (now called deviations) Requires all of the information in §§63.10(c)(5-13) and 63.8(c)(7-8)	No
§63.10(e)(4)	Reporting COMS data	Must submit COMS data with performance test data	No
§63.10(f)	Waiver for Recordkeeping/ Reporting	Procedures for Administrator to waive	Yes
§63.11	Flares	Requirements for flares	Yes
§63.12	Delegation	State authority to enforce standards	Yes
§63.13	Addresses	Addresses where reports, notifications, and requests are sent	Yes

§63.14	Incorporation by Reference	Test methods incorporated by reference	Yes
§63.15	Availability of Information	Public and confidential information	Yes

116. The following insignificant emissions units are located at this facility:

B017 - refinery fuel gas fired Trolumen oxidizer heater (PR 175011);
G001 - refinery gasoline/distillate dispensing facility for plant vehicles (PR 164966/164967/164968/164969);
T183 - organic liquid storage tank #100272;
T188 - stability additive storage tank;
T193 - organic liquid storage tank #100471;
Z016 - storage tanks for organic liquids, less than or equal to 10,000 gallons, vapor pressure less than 1.5 psia with submerged fill; and
Z026 - solvent degreasers.

Each insignificant emissions 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 the identified permit to install for the emissions unit. Insignificant emissions units listed above that are not subject to specific permit to install requirements are subject to one or more applicable requirements contained in the SIP-approved versions of OAC Chapters 3745-17, 3745-18, and 3745-21.

B. State Only Enforceable Section

1. The following insignificant emissions units located at this facility are exempt from permit requirements because they are not subject to any applicable requirements or because they meet the "de minimis" criteria established in OAC rule 3745-15-05:

P035 - two diesel-operated firewater pumps;
Z013 - Trolumen belt flush-out pit;
Z015 - storage tanks for inorganic liquids;
Z017 - storage tanks for acids, less than 7,500 gallons;
Z018 - sulfur storage pit;
Z023 - Trolumen flaking belt;
Z025 - loading rack for iso/alky/normal butane; and
Z029 - advanced wastewater treatment plant aeration tanks A and B.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Process Heater (B001)
Activity Description: Refinery Fuel Gas ***or Natural Gas*** Fired Vacuum Unit II heater (PR 175151)

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
refinery fuel gas or natural gas fired vacuum unit II heater, 162 million Btu/hr maximum (PR 175151)	OAC rule 3745-17-10(B)(1)	0.020 pound of particulate emissions (PE) per million Btu of actual heat input
	OAC rule 3745-18-08(C)(1)	0.15 pound of sulfur dioxide (SO2) per million Btu of actual heat input
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

2. Additional Terms and Conditions

2.a None

II Operational Restrictions

1. The permittee shall burn only refinery fuel gas or natural gas in this emissions unit. The sulfur content of the refinery fuel gas or natural gas burned in this emissions unit shall comply with the allowable SO2 emission limitation specified in section A.I.1.

III Monitoring and/or Recordkeeping

1. Samples of refinery fuel gas burned in this emissions unit shall be obtained on a monthly basis, and analyzed for heat content, density and sulfur content. The following ASTM sampling and analysis methods shall be used to obtain data for use in calculating the SO2 emission rate as outlined in section A.III.2 below:

   a. molar composition of refinery fuel gas - ASTM Method D2163; and

   b. heat content of refinery fuel gas - ASTM Method D2421.

2. The permittee shall record on a monthly basis, the calculated SO2 emission rate in pound per million Btu. The monthly SO2 emission rate shall be calculated in accordance with OAC rule 3745-18-04(F)(3), as follows:

   ER = (1 x 10^6)/H x D x S x 1.998

   where:

   ER = the emission rate in pounds of SO2 per million Btu;

   H = the heat content of the gaseous fuel in Btu per standard cubic foot;

   D = the density of the gaseous fuel in pounds per standard cubic foot; and

   S = the decimal fraction of sulfur in the gaseous fuel.

3. 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 and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the SO2 emission limitation of 0.15 pound of SO2 per million Btu of actual heat input was exceeded, based upon the calculations specified in section A.III.2.

2. 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 this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

0.020 pound of PE per million Btu of actual heat input

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly refinery fuel gas or natural gas combustion rate, in million standard cubic feet per hour, by the appropriate particulate emission factor, in pound(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the process heater. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 5 and the requirements specified in OAC rule 3745-17-03(B)(9).

1.b Emission Limitation:

0.15 pound of SO2 per million Btu of actual heat input

Applicable Compliance Method:

The monitoring, record keeping and reporting requirements in sections A.III.2 and A.IV.1 of this permit shall be used to demonstrate compliance with the above limitation. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 6 and the requirements specified in OAC rule 3745-18-04(E)(1).

1.c Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible particulate emission limitation above in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and the requirements specified in OAC rule 3745-17-03(B)(1).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Process Heaters (B002)
Activity Description: Refinery Fuel Gas ***or Natural Gas*** fired ISO Stabilizer/Splitter Heaters (PR 170003/PR 175155)

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
refinery fuel gas or natural gas fired ISO stabilizer/splitter heaters, 369 million Btu/hr maximum, combined heat input (PR 170003/PR 175155)	OAC rule 3745-17-10(B)(1)	0.020 pound of particulate emissions (PE) per million Btu of actual heat input
	OAC rule 3745-18-08(C)(2)	1.0 pound of sulfur dioxide (SO2) per million Btu of actual heat input
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

2. Additional Terms and Conditions

2.a None

II Operational Restrictions

1. The permittee shall burn only refinery fuel gas or natural gas in this emissions unit. The sulfur content of the refinery fuel gas or natural gas burned in this emissions unit shall comply with the allowable SO2 emission limitation specified in section A.I.1.

III Monitoring and/or Recordkeeping

1. Samples of refinery fuel gas burned in this emissions unit shall be obtained on a monthly basis, and analyzed for heat content, density and sulfur content. The following ASTM sampling and analysis methods shall be used to obtain data for use in calculating the SO2 emission rate as outlined in section A.III.2 below:

   a. molar composition of refinery fuel gas - ASTM Method D2163; and

   b. heat content of refinery fuel gas - ASTM Method D2421.

2. The permittee shall record on a monthly basis, the calculated SO2 emission rate in pound per million Btu. The monthly SO2 emission rate shall be calculated in accordance with OAC rule 3745-18-04(F)(3), as follows:

   ER = (1 x 10^6)/H x D x S x 1.998

   where:

   ER = the emission rate in pounds of SO2 per million Btu;

   H = the heat content of the gaseous fuel in Btu per standard cubic foot;

   D = the density of the gaseous fuel in pounds per standard cubic foot; and

   S = the decimal fraction of sulfur in the gaseous fuel.

3. 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 and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the SO2 emission limitation of 1.0 pound of SO2 per million Btu of actual heat input was exceeded, based upon the calculations specified in section A.III.2.

2. 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 this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

0.020 pound of PE per million Btu of actual heat input

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly refinery fuel gas or natural gas combustion rate, in million standard cubic feet per hour, by the appropriate particulate emission factor, in pound(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the process heater. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 5 and the requirements specified in OAC rule 3745-17-03(B)(9).

1.b Emission Limitation:

1.0 pound of SO2 per million Btu of actual heat input

Applicable Compliance Method:

The monitoring, record keeping and reporting requirements in sections A.III.2 and A.IV.1 of this permit shall be used to demonstrate compliance with the above limitation. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 6 and the requirements specified in OAC rule 3745-18-04(E)(1).

1.c Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible particulate emission limitation above in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and the requirements specified in OAC rule 3745-17-03(B)(1).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Process Heaters (B003)
Activity Description: Refinery Fuel Gas ***or Natural Gas*** fired ISO I & II Heaters (PR 175152/PR 175153)

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
refinery fuel gas or natural gas fired ISO I and II heaters, 109 million Btu/hr maximum, combined heat input (PR 175152/PR 175153)	OAC rule 3745-17-10(B)(1)	0.020 pound of particulate emissions (PE) per million Btu of actual heat input
	OAC rule 3745-18-08(C)(1)	0.15 pound of sulfur dioxide (SO2) per million Btu of actual heat input
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

2. Additional Terms and Conditions

2.a None

II Operational Restrictions

1. The permittee shall burn only refinery fuel gas or natural gas in this emissions unit. The sulfur content of the refinery fuel gas or natural gas burned in this emissions unit shall comply with the allowable SO2 emission limitation specified in section A.I.1.

III Monitoring and/or Recordkeeping

1. Samples of refinery fuel gas burned in this emissions unit shall be obtained on a monthly basis, and analyzed for heat content, density and sulfur content. The following ASTM sampling and analysis methods shall be used to obtain data for use in calculating the SO2 emission rate as outlined in section A.III.2 below:

   a. molar composition of refinery fuel gas - ASTM Method D2163; and

   b. heat content of refinery fuel gas - ASTM Method D2421.

2. The permittee shall record on a monthly basis, the calculated SO2 emission rate in pound per million Btu. The monthly SO2 emission rate shall be calculated in accordance with OAC rule 3745-18-04(F)(3), as follows:

   ER = (1 x 10^6)/H x D x S x 1.998

   where:

   ER = the emission rate in pounds of SO2 per million Btu;

   H = the heat content of the gaseous fuel in Btu per standard cubic foot;

   D = the density of the gaseous fuel in pounds per standard cubic foot; and

   S = the decimal fraction of sulfur in the gaseous fuel.

3. 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 and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the SO2 emission limitation of 0.15 pound of SO2 per million Btu of actual heat input was exceeded, based upon the calculations specified in section A.III.2.

2. 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 this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation -

0.020 pound of PE per million Btu of actual heat input

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly refinery fuel gas or natural gas combustion rate, in million standard cubic feet per hour, by the appropriate particulate emission factor, in pound(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the process heater. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 5 and the requirements specified in OAC rule 3745-17-03(B)(9).

1.b Emission Limitation -

0.15 pound of SO2 per million Btu of actual heat input

Applicable Compliance Method:

The monitoring, record keeping and reporting requirements in sections A.III.2 and A.IV.1 of this permit shall be used to demonstrate compliance with the above limitation. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 6 and the requirements specified in OAC rule 3745-18-04(E)(1).

1.c Emission Limitation -

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible particulate emission limitation above in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and the requirements specified in OAC rule 3745-17-03(B)(1).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Process Heater (B004)
Activity Description: Refinery Fuel Gas ***or Natural Gas*** fired Crude II Heater (PR 175150)

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
refinery fuel gas or natural gas fired crude II heater; 630 million Btu/hr maximum with low NOx burners (PR 175150)	OAC rule 3745-17-10(B)(1)	0.020 pound of particulate emissions (PE) per million Btu of actual heat input
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-18-08(C)(2)	1.0 pound of sulfur dioxide (SO2) per million Btu of actual heat input
	OAC rule 3745-23-06(B)	Minimize nitrogen oxides (NOx) emissions by use of the latest available control techniques and operating practices in accordance with best current technology (see A.I.2.c)
	OAC rule 3745-31-05(A)(3) (PTI 03-13794)	0.06 lb of NOx per million Btu of actual heat input, 165.56 tons of NOx/yr

	4.03 lbs of volatile organic compounds (VOC)/hr, 17.65 tons of VOC/yr
	See A.I.2.b
OAC rule 3745-31-05(D) (PTI 03-13794)	See A.I.2.a

2. Additional Terms and Conditions

2.a The permittee has requested a federally enforceable limitation for NOx of 0.06 lb per million Btu of actual heat input, 165.56 tons NOx/yr, 4.03 lbs VOC/hr, and 17.65 tons VOC /yr. The federally enforceable limitations shall be established in accordance with OAC rule 3745-31-05(A)(3). The permittee has requested federally enforceable NOx and VOC emission limitations for purposes of avoiding Prevention of Significant Deterioration (PSD) permitting by emissions netting, as established in PTI 03-13794.

2.b Best Available Technology (BAT) control requirements for this emissions unit has been determined to be use of low NOx burners.

2.c 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 control requirements established pursuant to OAC rule 3745-31-05(A)(3) in PTI 03-13794.

II Operational Restrictions

1. The permittee shall burn only refinery fuel gas or natural gas in this emissions unit. The sulfur content of the refinery fuel gas or natural gas burned in this emissions unit shall comply with the allowable SO2 emission limitation specified in section A.I.1.

III Monitoring and/or Recordkeeping

1. Samples of refinery fuel gas burned in this emissions unit shall be obtained on a monthly basis, and analyzed for heat content, density and sulfur content. The following ASTM sampling and analysis methods shall be used to obtain data for use in calculating the SO2 emission rate as outlined in section A.III.2 below:

   a. molar composition of refinery fuel gas - ASTM Method D2163; and

   b. heat content of refinery fuel gas - ASTM Method D2421.

2. The permittee shall record on a monthly basis, the calculated SO2 emission rate in pound per million Btu. The monthly SO2 emission rate shall be calculated in accordance with OAC rule 3745-18-04(F)(3), as follows:

   ER = (1 x 10^6)/H x D x S x 1.998

   where:

   ER = the emission rate in pounds of SO2 per million Btu;

   H = the heat content of the gaseous fuel in Btu per standard cubic foot;

   D = the density of the gaseous fuel in pounds per standard cubic foot; and

   S = the decimal fraction of sulfur in the gaseous fuel.

3. 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 and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the SO2 emission limitation of 1.0 pound of SO2 per million Btu of actual heat input was exceeded, based upon the calculations specified in section A.III.2.

2. 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 this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

0.020 pound of PE per million Btu of actual heat input

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by dividing the appropriate particulate emission factor of 1.9 pounds per million standard cubic feet, from AP-42 Chapter 1.4

(7/98), by the heat content of 853 Btu per standard cubic feet for the refinery fuel gas fired in this emissions unit. If natural gas is solely being fired, the permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly natural gas combustion rate, in million standard cubic feet per hour, by the appropriate particulate emission factor, in pound(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the process heater. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 5 and the requirements specified in OAC rule 3745-17-03(B)(9).

1.b Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible particulate emission limitation above in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and the requirements specified in OAC rule 3745-17-03(B)(1).

1.c Emission Limitation:

1.0 pound of SO2 per million Btu of actual heat input

Applicable Compliance Method:

The monitoring, record keeping and reporting requirements in sections A.III.1, A.III.2 and A.IV of this permit shall be used to demonstrate compliance with the above limitation. The monthly SO2 emissions shall be calculated in accordance with the equation in OAC rule 3745-18-04(F)(3). If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 6 and the requirements specified in OAC rule 3745-18-04(E)(1).

1.d Emission Limitation:

0.06 lb of NOx per million Btu of actual heat input

Applicable Compliance Method:

The emission limitation is based on the burner manufacturer's emissions data for low NOx burners to be installed on this emissions unit. If required, the permittee shall demonstrate

compliance based upon emission tests performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 7.

1.e Emission Limitation:

165.56 tons of NOx/yr

Applicable Compliance Method:

The annual emission limitation was derived by multiplying the 0.06 lb of NOx per million Btu emission limitation times the maximum heat input capacity of 630 million Btu/hr for the crude II heater, then multiplying by 8,760 hrs/yr and dividing by 2,000 lbs/ton. Compliance with the annual limitation shall be shown as long as compliance with the 0.06 lb of NOx per million Btu emission limitation is maintained.

1.f Emission Limitation:

4.03 lbs of VOC/hr, 17.65 tons of VOC/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by dividing the appropriate VOC emission factor of 5.5 pounds per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), by the heat content of 853 Btu per standard cubic foot for the refinery fuel gas fired in this emissions unit. If natural gas is solely being fired, the permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly natural gas combustion rate, in million standard cubic feet per hour, by the appropriate VOC emission factor, in pound(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the process heater. If required, the permittee shall demonstrate compliance with the hourly emission limitation by conducting emission testing in accordance with 40 CFR, Part 60, Appendix A, Methods 18, 25, or 25A, as appropriate.

The annual emission limitation was derived by multiplying the hourly emission limitation times 8,760 hrs/yr and dividing by 2,000 lbs/ton. Compliance with the annual limitation shall be shown as long as compliance with the hourly emission limitation is maintained.

2. 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 12 months of the issuance of this permit and annually thereafter.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for NOx.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for NOx, Method 7 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 appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. 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).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Process Heater (B005)
Activity Description: Refinery Fuel Gas ***or Natural Gas*** fired Reformate Splitter Reboiler (PR 175168)

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
refinery fuel gas or natural gas fired reformate splitter reboiler, 118 million Btu/hr maximum (PR 175168)	OAC rule 3745-17-10(B)(1)	0.020 pound of particulate emissions (PE) per million Btu of actual heat input
	OAC rule 3745-18-08(C)(2)	1.0 pound of sulfur dioxide (SO2) per million Btu of actual heat input
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

2. Additional Terms and Conditions

2.a None

II Operational Restrictions

1. The permittee shall burn only refinery fuel gas or natural gas in this emissions unit. The sulfur content of the refinery fuel gas or natural gas burned in this emissions unit shall comply with the allowable SO2 emission limitation specified in section A.I.1.

III Monitoring and/or Recordkeeping

1. Samples of refinery fuel gas burned in this emissions unit shall be obtained on a monthly basis, and analyzed for heat content, density and sulfur content. The following ASTM sampling and analysis methods shall be used to obtain data for use in calculating the SO2 emission rate as outlined in section A.III.2 below:

   a. molar composition of refinery fuel gas - ASTM Method D2163; and

   b. heat content of refinery fuel gas - ASTM Method D2421.

2. The permittee shall record on a monthly basis, the calculated SO2 emission rate in pound per million Btu. The monthly SO2 emission rate shall be calculated in accordance with OAC rule 3745-18-04(F)(3), as follows:

   ER = (1 x 10^6)/H x D x S x 1.998

   where:

   ER = the emission rate in pounds of SO2 per million Btu;

   H = the heat content of the gaseous fuel in Btu per standard cubic foot;

   D = the density of the gaseous fuel in pounds per standard cubic foot; and

   S = the decimal fraction of sulfur in the gaseous fuel.

3. 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 and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the SO2 emission limitation of 1.0 pound of SO2 per million Btu of actual heat input was exceeded, based upon the calculations specified in section A.III.2.

2. 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 this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

0.020 pound of PE per million Btu of actual heat input

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly refinery fuel gas or natural gas combustion rate, in million standard cubic feet per hour, by the appropriate particulate emission factor, in pound(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the process heater. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 5 and the requirements specified in OAC rule 3745-17-03(B)(9).

1.b Emission Limitation:

1.0 pound of SO2 per million Btu of actual heat input

Applicable Compliance Method:

The monitoring, record keeping and reporting requirements in sections A.III.2 and A.IV.1 of this permit shall be used to demonstrate compliance with the above limitation. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 6 and the requirements specified in OAC rule 3745-18-04(E)(1).

1.c Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible particulate emission limitation above in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and the methods specified in OAC rule 3745-17-03(B)(1).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Process Heaters (B006)
Activity Description: Refinery Fuel Gas ***or Natural Gas*** fired U/F PRE, 1, 2, & 3 Heater (PR 175156-175159)

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
refinery fuel gas or natural gas fired U/F PRE, 1, 2, & 3 heater; 1,954 million Btu/hr maximum, combined heat input (PR 175156/PR 175157/ PR 175158/PR 175159)	OAC rule 3745-17-10(B)(1)	0.020 pound of particulate emissions (PE) per million Btu of actual heat input
	OAC rule 3745-18-08(C)(1)	0.15 pound of sulfur dioxide (SO2) per million Btu of actual heat input
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

2. Additional Terms and Conditions

2.a None

II Operational Restrictions

1. The permittee shall burn only refinery fuel gas or natural gas in this emissions unit. The sulfur content of the refinery fuel gas or natural gas burned in this emissions unit shall comply with the allowable SO2 emission limitation specified in section A.I.1.

III Monitoring and/or Recordkeeping

1. Samples of refinery fuel gas burned in this emissions unit shall be obtained on a monthly basis, and analyzed for heat content, density and sulfur content. The following ASTM sampling and analysis methods shall be used to obtain data for use in calculating the SO2 emission rate as outlined in section A.III.2 below:

   a. molar composition of refinery fuel gas - ASTM Method D2163; and

   b. heat content of refinery fuel gas - ASTM Method D2421.

2. The permittee shall record on a monthly basis, the calculated SO2 emission rate in pound per million Btu. The monthly SO2 emission rate shall be calculated in accordance with OAC rule 3745-18-04(F)(3), as follows:

   ER = (1 x 10^6)/H x D x S x 1.998

   where:

   ER = the emission rate in pounds of SO2 per million Btu;

   H = the heat content of the gaseous fuel in Btu per standard cubic foot;

   D = the density of the gaseous fuel in pounds per standard cubic foot; and

   S = the decimal fraction of sulfur in the gaseous fuel.

3. 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 and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the SO2 emission limitation of 0.15 pound of SO2 per million Btu of actual heat input was exceeded, based upon the calculations specified in section A.III.2.

2. 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 this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

0.020 pound of PE per million Btu of actual heat input

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly refinery fuel gas or natural gas combustion rate, in million standard cubic feet per hour, by the appropriate particulate emission factor, in pound(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the process heater. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 5 and the requirements specified in OAC rule 3745-17-03(B)(9).

1.b Emission Limitation:

0.15 pound of SO2 per million Btu of actual heat input

Applicable Compliance Method:

The monitoring, record keeping and reporting requirements in sections A.III.2 and A.IV.1 of this permit shall be used to demonstrate compliance with the above limitation. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 6 and the requirements specified in OAC rule 3745-18-04(E)(1).

1.c Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible particulate emission limitation above in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and the requirements specified in OAC rule 3745-17-03(B)(1).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Process Heater (B007)
Activity Description: Refinery Fuel Gas ***or Natural Gas*** fired Reformer Regenerator Heater (PR 175162)

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
refinery fuel gas or natural gas fired reformer regenerator heater, 110 million Btu/hr maximum (PR 175162)	OAC rule 3745-17-10(B)(1)	0.020 pound of particulate emissions (PE) per million Btu of actual heat input
	OAC rule 3745-18-08(C)(1)	0.15 pound of sulfur dioxide (SO2) per million Btu of actual heat input
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

2. Additional Terms and Conditions

2.a None

II Operational Restrictions

1. The permittee shall burn only refinery fuel gas or natural gas in this emissions unit. The sulfur content of the refinery fuel gas or natural gas burned in this emissions unit shall comply with the allowable SO2 emission limitation specified in section A.I.1.

III Monitoring and/or Recordkeeping

1. Samples of refinery fuel gas burned in this emissions unit shall be obtained on a monthly basis, and analyzed for heat content, density and sulfur content. The following ASTM sampling and analysis methods shall be used to obtain data for use in calculating the SO2 emission rate as outlined in section A.III.2 below:

   a. molar composition of refinery fuel gas - ASTM Method D2163; and

   b. heat content of refinery fuel gas - ASTM Method D2421.

2. The permittee shall record on a monthly basis, the calculated SO2 emission rate in pound per million Btu. The monthly SO2 emission rate shall be calculated in accordance with OAC rule 3745-18-04(F)(3), as follows:

   ER = (1 x 10^6)/H x D x S x 1.998

   where:

   ER = the emission rate in pounds of SO2 per million Btu;

   H = the heat content of the gaseous fuel in Btu per standard cubic foot;

   D = the density of the gaseous fuel in pounds per standard cubic foot; and

   S = the decimal fraction of sulfur in the gaseous fuel.

3. 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 and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the SO2 emission limitation of 0.15 pound of SO2 per million Btu of actual heat input was exceeded, based upon the calculations specified in section A.III.2.

2. 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 this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

0.020 pound of PE per million Btu of actual heat input

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly refinery fuel gas or natural gas combustion rate, in million standard cubic feet per hour, by the appropriate particulate emission factor, in pound(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the process heater. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 5 and the requirements specified in OAC rule 3745-17-03(B)(9).

1.b Emission Limitation:

0.15 pound of SO2 per million Btu of actual heat input

Applicable Compliance Method:

The monitoring, record keeping and reporting requirements in sections A.III.2 and A.IV.1 of this permit shall be used to demonstrate compliance with the above limitation. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 6 and the requirements specified in OAC rule 3745-18-04(E)(1).

1.c Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible particulate emission limitation above in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and the requirements specified in OAC rule 3745-17-03(B)(1).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Process Heater (B008)
Activity Description: Refinery Fuel Gas ***or Natural Gas*** fired HDS Heater (PR 175169)

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
refinery fuel gas or natural gas fired HDS heater, 278 million Btu/hr maximum (PR 175169)	OAC rule 3745-17-10(B)(1)	0.020 pound of particulate emissions (PE) per million Btu of actual heat input
	OAC rule 3745-18-08(C)(1)	0.15 pound of sulfur dioxide (SO2) per million Btu of actual heat input
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

2. Additional Terms and Conditions

2.a None

II Operational Restrictions

1. The permittee shall burn only refinery fuel gas or natural gas in this emissions unit. The sulfur content of the refinery fuel gas or natural gas burned in this emissions unit shall comply with the allowable SO2 emission limitation specified in section A.I.1.

III Monitoring and/or Recordkeeping

1. Samples of refinery fuel gas burned in this emissions unit shall be obtained on a monthly basis, and analyzed for heat content, density and sulfur content. The following ASTM sampling and analysis methods shall be used to obtain data for use in calculating the SO2 emission rate as outlined in section A.III.2 below:

   a. molar composition of refinery fuel gas - ASTM Method D2163; and

   b. heat content of refinery fuel gas - ASTM Method D2421.

2. The permittee shall record on a monthly basis, the calculated SO2 emission rate in pound per million Btu. The monthly SO2 emission rate shall be calculated in accordance with OAC rule 3745-18-04(F)(3), as follows:

   ER = (1 x 10^6)/H x D x S x 1.998

   where:

   ER = the emission rate in pounds of SO2 per million Btu;

   H = the heat content of the gaseous fuel in Btu per standard cubic foot;

   D = the density of the gaseous fuel in pounds per standard cubic foot; and

   S = the decimal fraction of sulfur in the gaseous fuel.

3. 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 and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the SO2 emission limitation of 0.15 pound of SO2 per million Btu of actual heat input was exceeded, based upon the calculations specified in section A.III.2.

2. 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 this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

0.020 pound of PE per million Btu of actual heat input

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly refinery fuel gas or natural gas combustion rate, in million standard cubic feet per hour, by the appropriate particulate emission factor, in pound(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the process heater. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 5 and the requirements specified in OAC rule 3745-17-03(B)(9).

1.b Emission Limitation:

0.15 pound of SO2 per million Btu of actual heat input

Applicable Compliance Method:

The monitoring, record keeping and reporting requirements in sections A.III.2 and A.IV.1 of this permit shall be used to demonstrate compliance with the above limitation. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 6 and the requirements specified in OAC rule 3745-18-04(E)(1).

1.c Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible particulate emission limitation above in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and the requirements specified in OAC rule 3745-17-03(B)(1).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Steam Generating Unit (B009)
Activity Description: Refinery Fuel Gas ***or Natural Gas*** fired Riley Boiler (PR 175071)

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
refinery fuel gas or natural gas fired Riley boiler, 240 million Btu/hr maximum (PR 175071)	OAC rule 3745-17-10(B)(1)	0.020 pound of particulate emissions (PE) per million Btu of actual heat input
	OAC rule 3745-18-08(C)(1)	0.15 pound of sulfur dioxide (SO2) per million Btu of actual heat input
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

2. Additional Terms and Conditions

2.a None

II Operational Restrictions

1. The permittee shall burn only refinery fuel gas or natural gas in this emissions unit. The sulfur content of the refinery fuel gas or natural gas burned in this emissions unit shall comply with the allowable SO2 emission limitation specified in section A.I.1.

III Monitoring and/or Recordkeeping

1. Samples of refinery fuel gas burned in this emissions unit shall be obtained on a monthly basis, and analyzed for heat content, density and sulfur content. The following ASTM sampling and analysis methods shall be used to obtain data for use in calculating the SO2 emission rate as outlined in section A.III.2 below:

   a. molar composition of refinery fuel gas - ASTM Method D2163; and

   b. heat content of refinery fuel gas - ASTM Method D2421.

2. The permittee shall record on a monthly basis, the calculated SO2 emission rate in pound per million Btu. The SO2 emission rate shall be calculated in accordance with OAC rule 3745-18-04(F)(3), as follows:

   ER = (1 x 10^6)/H x D x S x 1.998

   where:

   ER = the emission rate in pounds of SO2 per million Btu;

   H = the heat content of the gaseous fuel in Btu per standard cubic foot;

   D = the density of the gaseous fuel in pounds per standard cubic foot; and

   S = the decimal fraction of sulfur in the gaseous fuel.

3. 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 and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the SO2 emission limitation of 0.15 pound of SO2 per million Btu of actual heat input was exceeded, based upon the calculations specified in section A.III.2.

2. 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 this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

0.020 pound of PE per million Btu of actual heat input

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly refinery fuel gas or natural gas combustion rate, in million standard cubic feet per hour, by the appropriate particulate emission factor, in pound(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the process heater. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 5 and the requirements specified in OAC rule 3745-17-03(B)(9).

1.b Emission Limitation:

0.15 pound of SO2 per million Btu of actual heat input

Applicable Compliance Method:

The monitoring, record keeping and reporting requirements in sections A.III.2 and A.IV.1 of this permit shall be used to demonstrate compliance with the above limitation. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 6 and the requirements specified in OAC rule 3745-18-04(E)(1).

1.c Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible particulate emission limitation above in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and the requirements specified in OAC rule 3745-17-03(B)(1).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Process Heater (B016)
Activity Description: Refinery Fuel Gas ***or Natural Gas*** fired FCC furnace (PR 175025)

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
refinery fuel gas or natural gas fired FCC furnace, 112 million Btu/hr maximum (PR 175025)	OAC rule 3745-17-10(B)(1)	0.020 pound of particulate emissions (PE) per million Btu of actual heat input
	OAC rule 3745-18-08(C)(1)	0.15 pound of sulfur dioxide (SO2) per million Btu of actual heat input
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

2. Additional Terms and Conditions

2.a None

II Operational Restrictions

1. The permittee shall burn only refinery fuel gas or natural gas in this emissions unit. The sulfur content of the refinery fuel gas or natural gas burned in this emissions unit shall comply with the allowable SO2 emission limitation specified in section A.I.1.

III Monitoring and/or Recordkeeping

1. Samples of refinery fuel gas burned in this emissions unit shall be obtained on a monthly basis, and analyzed for heat content, density and sulfur content. The following ASTM sampling and analysis methods shall be used to obtain data for use in calculating the SO2 emission rate as outlined in section A.III.2 below:

   a. molar composition of refinery fuel gas - ASTM Method D2163; and

   b. heat content of refinery fuel gas - ASTM Method D2421.

2. The permittee shall record on a monthly basis, the calculated SO2 emission rate in pound per million Btu. The monthly SO2 emission rate shall be calculated in accordance with OAC rule 3745-18-04(F)(3), as follows:

   ER = (1 x 10^6)/H x D x S x 1.998

   where:

   ER = the emission rate in pounds of SO2 per million Btu;

   H = the heat content of the gaseous fuel in Btu per standard cubic foot;

   D = the density of the gaseous fuel in pounds per standard cubic foot; and

   S = the decimal fraction of sulfur in the gaseous fuel.

3. 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 and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the SO2 emission limitation of 0.15 pound of SO2 per million Btu of actual heat input was exceeded, based upon the calculations specified in section A.III.2.

2. 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 this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

0.020 pound of PE per million Btu of actual heat input

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly refinery fuel gas or natural gas combustion rate, in million standard cubic feet per hour, by the appropriate particulate emission factor, in pound(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the process heater. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 5 and the requirements specified in OAC rule 3745-17-03(B)(9).

1.b Emission Limitation:

0.15 pound of SO2 per million Btu of actual heat input

Applicable Compliance Method:

The monitoring, record keeping and reporting requirements in sections A.III.2 and A.IV.1 of this permit shall be used to demonstrate compliance with the above limitation. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 6 and the requirements specified in OAC rule 3745-18-04(E)(1).

1.c Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible particulate emission limitation above in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and the requirements specified in OAC rule 3745-17-03(B)(1).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Process Heater (B018)
Activity Description: Refinery Fuel Gas ***or Natural Gas*** fired Trolumen furnace (PR 175009)

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
refinery fuel gas or natural gas fired Trolumen furnace, 24 million Btu/hr maximum (PR 175009)	OAC rule 3745-17-10(B)(1)	0.020 pound of particulate emissions (PE) per million Btu of actual heat input
	OAC rule 3745-18-08(C)(1)	0.15 pound of sulfur dioxide (SO2) per million Btu of actual heat input
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

2. Additional Terms and Conditions

2.a None

II Operational Restrictions

1. The permittee shall burn only refinery fuel gas or natural gas in this emissions unit. The sulfur content of the refinery fuel gas or natural gas burned in this emissions unit shall comply with the allowable SO2 emission limitation specified in section A.I.1.

III Monitoring and/or Recordkeeping

1. Samples of refinery fuel gas burned in this emissions unit shall be obtained on a monthly basis, and analyzed for heat content, density and sulfur content. The following ASTM sampling and analysis methods shall be used to obtain data for use in calculating the SO2 emission rate as outlined in section A.III.2 below:

   a. molar composition of refinery fuel gas - ASTM Method D2163; and

   b. heat content of refinery fuel gas - ASTM Method D2421.

2. The permittee shall record on a monthly basis, the calculated SO2 emission rate in pound per million Btu. The monthly SO2 emission rate shall be calculated in accordance with OAC rule 3745-18-04(F)(3), as follows:

   ER = (1 x 10^6)/H x D x S x 1.998

   where:

   ER = the emission rate in pounds of SO2 per million Btu;

   H = the heat content of the gaseous fuel in Btu per standard cubic foot;

   D = the density of the gaseous fuel in pounds per standard cubic foot; and

   S = the decimal fraction of sulfur in the gaseous fuel.

3. 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 and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the SO2 emission limitation of 0.15 pound of SO2 per million Btu of actual heat input was exceeded, based upon the calculations specified in section A.III.2.

2. 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 this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

0.020 pound of PE per million Btu of actual heat input

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly refinery fuel gas or natural gas combustion rate, in million standard cubic feet per hour, by the appropriate particulate emission factor, in pound(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the process heater. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 5 and the requirements specified in OAC rule 3745-17-03(B)(9).

1.b Emission Limitation:

0.15 pound of SO2 per million Btu of actual heat input

Applicable Compliance Method:

The monitoring, record keeping and reporting requirements in sections A.III.2 and A.IV.1 of this permit shall be used to demonstrate compliance with the above limitation. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 6 and the requirements specified in OAC rule 3745-18-04(E)(1).

1.c Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible particulate emission limitation above in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and the requirements specified in OAC rule 3745-17-03(B)(1).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Process Heater (B022)
Activity Description: Refinery Fuel Gas ***or Natural Gas*** fired Hot Belt Oil Heater-Arom (PR 175102)

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
refinery fuel gas or natural gas fired hot oil belt heater - aromatics, 204 million Btu/hr maximum (PR 175102)	40 CFR Part 60, Subpart J	See section A.I.2.a.
	OAC rule 3745-17-10(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3)
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-31-05(A)(3) (PTI 03-1128)	0.014 pound of particulate emissions (PE) per million Btu of actual heat input 0.024 pound of sulfur dioxide (SO2) per million Btu of actual heat input 0.150 pound of nitrogen oxides (NOx) per million Btu of actual heat input

0.016 pound of carbon monoxide (CO) per million Btu of actual heat input

2. Additional Terms and Conditions

2.a The permittee shall not burn any refinery fuel gas in this emissions unit that contains hydrogen sulfide (H2S) in excess of 230 mg/dscm (0.10 grain/dscf). This H2S standard in 40 CFR 60.104(a)(1) is also applicable if the permittee combines and combusts natural gas in any proportion with refinery fuel gas in this emissions unit, according to the fuel gas definition in 40 CFR 60.101(d).

II Operational Restrictions

1. The permittee shall burn only refinery fuel gas or natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. In order to demonstrate compliance with the emission limitation of 230 mg/dscm (0.10 grain/dscf) of H2S in the refinery fuel gas (and if applicable, combined fuel firing as noted in A.I.2.a above), the permittee shall operate and maintain an instrument for continuously monitoring and recording the concentration (dry basis) of H2S in the refinery fuel gas or combined fuel stream before being burned in this emissions unit. The monitoring shall be conducted in accordance with 40 CFR 60.105(a)(4), as follows:

   a. The span value for this instrument is 425 mg/dscm of H2S.

   b. 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 H2S in the fuel gas being burned.

   c. The performance evaluations for this H2S monitor under 40 CFR 60.13(c) shall use Performance Specification 7 of 40 CFR 60, Appendix B. The permittee shall conduct an annual relative accuracy test audit (RATA) for the H2S continuous emission monitoring equipment. Method 11 of 40 CFR Part 60, Appendix A, or other approved U.S. EPA methods shall be used for conducting the annual RATAs.

2. A statement of certification of the existing H2S continuous emission monitoring system (CEMS) 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 7. Proof of certification shall be made available to representatives of the appropriate Ohio EPA District Office or local air agency upon request.

3. The permittee shall operate and maintain existing equipment to continuously monitor and record hydrogen sulfide from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

   The permittee shall maintain records of all data obtained by the H2S CEMS including, but not limited to, parts per million of H2S on an instantaneous (1-minute) basis, emissions of H2S in units of the applicable standard (grain/dscf) as a rolling, 3-hour average, the results of daily zero/span calibration checks, and the magnitudes of manual calibration adjustments.

4. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the CEMS designed to ensure continuous valid and representative readings of H2S. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. A logbook dedicated to the monitoring system must be kept on site and available for inspection during regular office hours.

5. 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 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 refinery fuel gas or natural gas is burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any H2S CEMS 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 source and CEMS 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 the quarterly report.

3. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) on a quarterly basis, in writing, of all rolling, 3-hour periods during which the average concentration of H2S as measured by the H2S CEMS under 40 CFR 60.105(a)(4) exceeds 230 mg/dscm (0.10 grain/dscf). The rolling, 3-hour average shall be determined as the arithmetic average of three contiguous 1-hour averages. The notification shall include a copy of the record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) by

January 30, April 30, July 30 and October 30 of each year and shall address the data obtained during previous calendar quarters.

4. If there are no concentrations of H2S in the refinery fuel gas (or combined fuel stream, if applicable) greater than the value specified in section A.I.2.a during the calendar quarter, then the permittee shall submit a statement to that effect along with the emissions unit and monitor operating times. These quarterly reports shall be submitted by January 30, April 30, July 30 and October 30 of each year and shall address the data obtained during previous calendar quarters.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

230 mg/dscm (0.10 grain/dscf) of H2S in the refinery fuel gas, or combined fuel stream if applicable

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in sections A.III.1 and A.III.3 of this permit. If required, the permittee shall determine compliance with the H2S emission limitation by using Method 11 of 40 CFR Part 60, Appendix A, or other approved USEPA methods.

1.b Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible particulate emission limitation above in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and the requirements specified in OAC rule 3745-17-03(B)(1).

1.c Emission Limitation:

0.014 pound of PE per million Btu of actual heat input

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly refinery fuel gas or natural gas combustion rate, in million standard cubic feet per hour, by the appropriate particulate emission factor, in pound(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the process heater. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Method 5 of 40 CFR Part 60, Appendix A.

1.d Emission Limitation:

0.024 pound of SO2 per million Btu of actual heat input

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly refinery fuel gas or natural gas combustion rate, in million standard cubic feet per hour, by the appropriate particulate emission factor, in pound(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the process heater. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Method 6 of 40 CFR Part 60, Appendix A.

1.e Emission Limitation:

0.150 pound of NOx per million Btu of actual heat input

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon the emission testing requirements specified in section A.V.2. Ongoing compliance with this emission limitation shall be demonstrated through emission testing in accordance with Ohio EPA, Office of Air Pollution Control, Division of Engineering, Engineering Guide #16.

1.f Emission Limitation:

0.016 pound of CO per million Btu of actual heat input

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly refinery fuel gas or natural gas combustion rate, in million standard cubic feet per hour, by

the appropriate particulate emission factor, in pound(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the process heater. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Method 10 of 40 CFR Part 60, Appendix A.

2. 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 1 year after permit issuance.

   b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate of 0.150 pound of NOx per million Btu of actual heat input.

   c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate of 0.150 pound of NOx per million Btu of actual heat input.

   d. Method 7, 7A, 7B, 7C, 7D, or 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.

   e. 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 appropriate Ohio EPA District Office or local air agency.

2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. 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).

   Personnel from the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Process Heater (B024)
Activity Description: Refinery Fuel Gas ***or Natural Gas*** fired Isomerization heater (PR 175110)

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
refinery fuel gas or natural gas fired isomerization heater, 59 million Btu/hr maximum (PR 175110)	40 CFR Part 60, Subpart J	See section A.I.2.a.
	OAC rule 3745-17-10(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3)
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-31-05(A)(3) (PTI 03-1128)	0.014 pound of particulate emissions (PE) per million Btu of actual heat input 0.024 pound of sulfur dioxide (SO2) per million Btu of actual heat input 0.150 pound of nitrogen oxides (NOx) per million Btu of actual heat input

0.016 pound of carbon monoxide (CO) per million Btu of actual heat input

2. Additional Terms and Conditions

2.a The permittee shall not burn any refinery fuel gas in this emissions unit that contains hydrogen sulfide (H2S) in excess of 230 mg/dscm (0.10 grain/dscf). This H2S standard in 40 CFR 60.104(a)(1) is also applicable if the permittee combines and combusts natural gas in any proportion with refinery fuel gas in this emissions unit, according to the fuel gas definition in 40 CFR 60.101(d).

II Operational Restrictions

1. The permittee shall burn only refinery fuel gas or natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. In order to demonstrate compliance with the emission limitation of 230 mg/dscm (0.10 grain/dscf) of H2S in the refinery fuel gas (and if applicable, combined fuel firing as noted in A.I.2.a above), the permittee shall operate and maintain an instrument for continuously monitoring and recording the concentration (dry basis) of H2S in the refinery fuel gas or combined fuel stream before being burned in this emissions unit. The monitoring shall be conducted in accordance with 40 CFR 60.105(a)(4), as follows:

   a. The span value for this instrument is 425 mg/dscm of H2S.

   b. 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 H2S in the fuel gas being burned.

   c. The performance evaluations for this H2S monitor under 40 CFR 60.13(c) shall use Performance Specification 7 of 40 CFR 60, Appendix B. The permittee shall conduct an annual relative accuracy test audit (RATA) for the H2S continuous emission monitoring equipment. Method 11 of 40 CFR Part 60, Appendix A, or other approved U.S. EPA methods shall be used for conducting the annual RATAs.

2. A statement of certification of the existing H2S continuous emission monitoring system (CEMS) 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 7. Proof of certification shall be made available to representatives of the appropriate Ohio EPA District Office or local air agency upon request.

3. The permittee shall operate and maintain existing equipment to continuously monitor and record hydrogen sulfide from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

   The permittee shall maintain records of all data obtained by the H2S CEMS including, but not limited to, parts per million of H2S on an instantaneous (1-minute) basis, emissions of H2S in units of the applicable standard (grain/dscf) as a rolling, 3-hour average, the results of daily zero/span calibration checks, and the magnitudes of manual calibration adjustments.

4. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the CEMS designed to ensure continuous valid and representative readings of H2S. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. A logbook dedicated to the monitoring system must be kept on site and available for inspection during regular office hours.

5. 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 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 refinery fuel gas or natural gas is burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any H2S CEMS 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 source and CEMS 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 the quarterly report.

3. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) on a quarterly basis, in writing, of all rolling, 3-hour periods during which the average concentration of H2S as measured by the H2S CEMS under 40 CFR 60.105(a)(4) exceeds 230 mg/dscm (0.10 grain/dscf). The rolling, 3-hour average shall be determined as the arithmetic average of three contiguous 1-hour averages. The notification shall include a copy of the record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) by

January 30, April 30, July 30 and October 30 of each year and shall address the data obtained during previous calendar quarters.

4. If there are no concentrations of H2S in the refinery fuel gas (or combined fuel stream, if applicable) greater than the value specified in section A.I.2.a during the calendar quarter, then the permittee shall submit a statement to that effect along with the emissions unit and monitor operating times. These quarterly reports shall be submitted by January 30, April 30, July 30 and October 30 of each year and shall address the data obtained during previous calendar quarters.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

230 mg/dscm (0.10 grain/dscf) of H2S in the refinery fuel gas, or combined fuel stream if applicable

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in sections A.III.1 and A.III.3 of this permit. If required, the permittee shall determine compliance with the H2S emission limitation by using Method 11 of 40 CFR Part 60, Appendix A, or other approved USEPA methods.

1.b Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible particulate emission limitation above in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and the requirements specified in OAC rule 3745-17-03(B)(1).

1.c Emission Limitation:

0.014 pound of PE per million Btu of actual heat input

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly refinery fuel gas or natural gas combustion rate, in million standard cubic feet per hour, by the appropriate particulate emission factor, in pound(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the process heater. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Method 5 of 40 CFR Part 60, Appendix A.

1.d Emission Limitation:

0.024 pound of SO2 per million Btu of actual heat input

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly refinery fuel gas or natural gas combustion rate, in million standard cubic feet per hour, by the appropriate particulate emission factor, in pound(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the process heater. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Method 6 of 40 CFR Part 60, Appendix A.

1.e Emission Limitation:

0.150 pound of NOx per million Btu of actual heat input

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly refinery fuel gas or natural gas combustion rate, in million standard cubic feet per hour, by the appropriate particulate emission factor, in pound(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the process heater. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Method 7 of 40 CFR Part 60, Appendix A.

1.f Emission Limitation:

0.016 pound of CO per million Btu of actual heat input

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly refinery fuel gas or natural gas combustion rate, in million standard cubic feet per hour, by the appropriate particulate emission factor, in pound(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the process heater. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Method 10 of 40 CFR Part 60, Appendix A.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Steam Generating Unit (B026)
Activity Description: Refinery Fuel Gas ***or Natural Gas*** fired CE Power Boiler (PR 175007)

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
refinery fuel gas or natural gas fired CE power boiler, 317 million Btu/hr maximum (PR 175007)	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-10(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3)
	40 CFR Part 60, Subpart Db	exempt (See section A.I.2.a.)
	OAC rule 3745-31-05(A)(3) (PTI 03-4991)	1.03 lbs of particulate emissions (PE) per hour 0.13 lb of nitrogen oxides (NOx) per million Btu of actual heat input 41.21 lbs of NOx per hour 13.72 lbs of carbon monoxide (CO) per hour

	0.74 lb of volatile organic compounds (VOC) per hour (See section A.I.2.b.)
	8.57 lbs of sulfur dioxide (SO2) per hour
40 CFR Part 60, Subpart J	See section A.I.2.c.

2. Additional Terms and Conditions

2.a 40 CFR Part 60, Subpart Db is an applicable rule for this emissions unit, since the emissions unit was constructed after June 19, 1984 and the heat input capacity is greater than 100 million Btu per hour. However, none of the fuels listed in the rule are burned in this emissions unit. Therefore, the SO2, PE, visible particulate emissions, and NOx emission limitations listed in 40 CFR 60.42b, 60.43b and 60.44b are not applicable; and performance test methods, monitoring, record keeping and reporting requirements in 40 CFR 60.45b, 60.46b, 60.47b, 60.48b, 60.49b are also not applicable.

2.b The emission limitation of 0.74 lb of VOC/hr includes fugitive VOC emissions.

2.c The permittee shall not burn any refinery fuel gas in this emissions unit that contains hydrogen sulfide (H2S) in excess of 230 mg/dscm (0.10 grain/dscf). This H2S standard in 40 CFR 60.104(a)(1) is also applicable if the permittee combines and combusts natural gas in any proportion with refinery fuel gas in this emissions unit, according to the fuel gas definition in 40 CFR 60.101(d).

II Operational Restrictions

1. The permittee shall burn only refinery fuel gas or natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. In order to demonstrate compliance with the emission limitation of 230 mg/dscm (0.10 grain/dscf) of H2S in the refinery fuel gas (and if applicable, combined fuel firing as noted in A.I.2.c above), the permittee shall operate and maintain an instrument for continuously monitoring and recording the concentration (dry basis) of H2S in the refinery fuel gas or combined fuel stream before being burned in this emissions unit. The monitoring shall be conducted in accordance with 40 CFR 60.105(a)(4), as follows:

   a. The span value for this instrument is 425 mg/dscm of H2S.

b. 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 H2S in the fuel gas being burned.

c. The performance evaluations for this H2S monitor under 40 CFR 60.13(c) shall use Performance Specification 7 of 40 CFR 60, Appendix B. The permittee shall conduct an annual relative accuracy test audit (RATA) for the H2S continuous emission monitoring equipment. Method 11 of 40 CFR Part 60, Appendix A, or other approved U.S. EPA methods shall be used for conducting the annual RATAs.

2. A statement of certification of the existing H2S continuous emission monitoring system (CEMS) 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 7. Proof of certification shall be made available to representatives of the appropriate Ohio EPA District Office or local air agency upon request.

3. The permittee shall operate and maintain existing equipment to continuously monitor and record hydrogen sulfide from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

   The permittee shall maintain records of all data obtained by the H2S CEMS including, but not limited to, parts per million of H2S on an instantaneous (1-minute) basis, emissions of H2S in units of the applicable standard (grain/dscf) as a rolling, 3-hour average, the results of daily zero/span calibration checks, and the magnitudes of manual calibration adjustments.

4. In order to demonstrate compliance with the emission limitation of 0.13 pound of NOx per million Btu of actual heat input, the permittee shall operate and maintain an instrument for continuously monitoring and recording NOx from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13, as follows:

   a. The span value for this instrument is 500 parts per million of NOx.

   b. The performance evaluations for this NOx monitor under 40 CFR 60.13(c) shall use Performance Specification 7 of 40 CFR Part 60, Appendix B. The permittee shall conduct an annual relative accuracy test audit (RATA) for the NOx continuous emission monitoring equipment. Method 7 of 40 CFR Part 60, Appendix A, or other approved U.S. EPA methods shall be used for conducting the annual RATAs.

5. A statement of certification of the existing continuous NOx 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 Director (the appropriate Ohio EPA District Office or local air agency) upon request.

6. The permittee shall maintain records of all data obtained by the continuous NOx monitoring system including, but not limited to, parts per million NOx on an instantaneous (one-minute) basis, emissions of NOx in units of the applicable standard in the appropriate averaging period (e.g., hourly, hourly rolling, 3-hour, daily, 30-day rolling, etc.), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

7. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the CEMS designed to ensure continuous valid and representative readings of H2S and NOx. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. A logbook dedicated to the monitoring system must be kept on site and available for inspection during regular office hours.

8. 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 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 refinery fuel gas or natural gas is burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any H2S CEMS 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 source 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 the quarterly report.

3. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) on a quarterly basis, in writing, of all rolling, 3-hour periods during which the average concentration of H2S as measured by the H2S CEMS under 40 CFR 60.105(a)(4) exceeds 230 mg/dscm (0.10 grain/dscf). The rolling, 3-hour average shall be determined as the arithmetic average of three contiguous 1-hour averages. The notification shall include a copy of the record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) by

January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during previous calendar quarters.

4. If there are no concentrations of H2S in the refinery fuel gas (or combined fuel stream, if applicable) greater than 230 mg/dscm (0.10 grain/dscf) during the calendar quarter, then the permittee shall submit a statement to that effect along with the emissions unit and monitor operating times. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during previous calendar quarters.

5. The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of NOx values in excess of the applicable limits specified in the terms and conditions of this permit. These reports shall also contain the total NOx emissions for the calendar quarter (in tons).

6. The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any continuous NOx 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 also be included in the quarterly report.

7. If there are no excess NOx 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.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible particulate emission limitation above in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and the requirements specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

1.03 lbs of PE per hour

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly refinery fuel gas or natural gas combustion rate, in million standard cubic feet per hour, by the appropriate particulate emission factor, in pound(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the CE power boiler. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A.

1.c Emission Limitation:

0.13 lb of NOx per million Btu of actual heat input

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in sections A.III.4 and A.III.6 of this permit. If required, the permittee shall determine compliance with the NOx emission limitation by using Method 7 of 40 CFR Part 60, Appendix A, or other approved USEPA methods.

1.d Emission Limitation:

41.21 lbs of NOx per hour

Applicable Compliance Method:

The emission limitation was developed by multiplying the limitation of 0.13 pound of NOx per million Btu by the maximum heat input of 317 million Btu per hour. If required, the permittee shall determine compliance with the NOx emission limitation by using Methods 1 through 4 and Method 7 of 40 CFR Part 60, Appendix A, or other approved USEPA methods.

1.e Emission Limitation:

13.72 lbs of CO per hour

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly refinery fuel gas or natural gas combustion rate, in million standard cubic feet per hour, by the appropriate carbon monoxide emission factor, in pound(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the CE power boiler. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Methods 1 through 4 and Method 10, 40 CFR Part 60, Appendix A.

1.f Emission Limitation:

0.74 lb of VOC per hour

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly refinery fuel gas or natural gas combustion rate, in million standard cubic feet per hour, by the appropriate volatile organic compound emission factor, in pound(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the CE power boiler. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Methods 1 through 4 and Method 18, 25 or 25A of 40 CFR Part 60, Appendix A.

1.g Emission Limitation:

8.57 lbs of SO2 per hour

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly refinery fuel gas or natural gas combustion rate, in million standard cubic feet per hour, by the appropriate sulfur dioxide emission factor, in pound(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the CE power boiler. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Methods 1 through 4 and Method 6, 40 CFR Part 60, Appendix A.

1.h Emission Limitation:

230 mg/dscm (0.10 grain/dscf) of H2S in the refinery fuel gas, or combined fuel stream if applicable

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in sections A.III.1 and A.III.3 of this permit. If required, the permittee shall determine compliance with the H2S emission limitation by using Method 11 of 40 CFR Part 60, Appendix A, or other approved USEPA methods.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Process Heater (B027)
Activity Description: Refinery Fuel Gas ***or Natural Gas*** fired Coker Furnace (PR 170002)

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
refinery fuel gas or natural gas fired coker furnace, 187.2 million Btu/hr maximum (PR 170002)	OAC rule 3745-31-05(A)(3) (PTI 03-8161)	0.46 lb of particulate emissions (PE) per hour 0.13 lb of nitrogen oxides (NOx) per million Btu of actual heat input 22.88 lbs of NOx per hour 4.30 lbs of sulfur dioxide (SO2) per hour 7.22 lbs of carbon monoxide (CO) per hour 0.25 lb of volatile organic compounds (VOC) per hour
	40 CFR Part 60, Subpart J	See section A.I.2.a.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

OAC rule 3745-17-10(B)(1)	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. Additional Terms and Conditions

2.a The permittee shall not burn any refinery fuel gas in this emissions unit that contains hydrogen sulfide (H2S) in excess of 230 mg/dscm (0.10 grain/dscf). This H2S standard in 40 CFR 60.104(a)(1) is also applicable if the permittee combines and combusts natural gas in any proportion with refinery fuel gas in this emissions unit, according to the fuel gas definition in 40 CFR 60.101(d).

II Operational Restrictions

1. The permittee shall burn only refinery fuel gas or natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. In order to demonstrate compliance with the emission limitation of 230 mg/dscm (0.10 grain/dscf) of H2S in the refinery fuel gas (and if applicable, combined fuel firing as noted in A.I.2.a above), the permittee shall operate and maintain an instrument for continuously monitoring and recording the concentration (dry basis) of H2S in the refinery fuel gas or combined fuel stream before being burned in this emissions unit. The monitoring shall be conducted in accordance with 40 CFR 60.105(a)(4), as follows:

   a. The span value for this instrument is 425 mg/dscm of H2S.

   b. 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 H2S in the fuel gas being burned.

   c. The performance evaluations for this H2S monitor under 40 CFR 60.13(c) shall use Performance Specification 7 of 40 CFR Part 60, Appendix B. The permittee shall conduct an annual relative accuracy test audit (RATA) for the H2S continuous emission monitoring equipment. Method 11 of 40 CFR Part 60, Appendix A, or other approved U.S. EPA methods shall be used for conducting the annual RATAs.

2. A statement of certification of the existing H2S continuous emission monitoring system (CEMS) 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 7. Proof of certification shall be made available to representatives of the appropriate Ohio EPA District Office or local air agency upon request.

3. The permittee shall operate and maintain existing equipment to continuously monitor and record hydrogen sulfide from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

   The permittee shall maintain records of all data obtained by the H2S CEMS including, but not limited to, parts per million of H2S on an instantaneous (1-minute) basis, emissions of H2S in units of the applicable standard (grain/dscf) as a rolling, 3-hour average, the results of daily zero/span calibration checks, and the magnitudes of manual calibration adjustments.

4. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the CEMS designed to ensure continuous valid and representative readings of H2S. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. A logbook dedicated to the monitoring system must be kept on site and available for inspection during regular office hours.

5. 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 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 refinery fuel gas or natural gas is burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any H2S CEMS 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 source 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 the quarterly report.

3. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) on a quarterly basis, in writing, of all rolling, 3-hour periods during which the average concentration of H2S as measured by the H2S CEMS under 40 CFR 60.105(a)(4) exceeds 230 mg/dscm (0.10 grain/dscf). The rolling, 3-hour average shall be determined as the arithmetic average of three contiguous 1-hour averages. The notification shall include a copy of the record

and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during previous calendar quarters.

4. If there are no concentrations of H2S in the refinery fuel gas (or combined fuel stream, if applicable) greater than the value specified in section A.I.2.a during the calendar quarter, then the permittee shall submit a statement to that effect along with the emissions unit and monitor operating times. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during previous calendar quarters.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible particulate emission limitation above in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and the requirements specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

0.46 lb of PE per hour

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly refinery fuel gas or natural gas combustion rate, in million standard cubic feet per hour, by the appropriate particulate emission factor, in pound(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the coker furnace. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A.

1.c Emission Limitation:

0.13 lb of NOx per million Btu of actual heat input

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in section A.V.2. Ongoing compliance with this emission limitation shall be demonstrated through emission testing in accordance with Ohio EPA, Office of Air Pollution Control, Division of Engineering, Engineering Guide #16.

1.d Emission Limitation:

22.88 lbs of NOx per hour

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in section A.V.2. Ongoing compliance with this emission limitation shall be demonstrated through emission testing in accordance with Ohio EPA, Office of Air Pollution Control, Division of Engineering, Engineering Guide #16.

1.e Emission Limitation:

4.30 lbs of SO2 per hour

Applicable Compliance Method:

The emission limitation is based on a maximum H2S content of the refinery fuel gas (or combined fuel stream, if applicable) fired in this emissions unit of 230 mg/dscm (0.10 grain/dscf). As long as the permittee maintains compliance with the H2S operational restriction in section A.I.2.a, compliance with the SO2 emission limitation will be assumed.

1.f Emission Limitation:

7.22 lbs of CO per hour

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in section A.V.2. Ongoing compliance with this emission limitation shall be demonstrated through emission testing in accordance with Ohio EPA, Office of Air Pollution Control, Division of Engineering, Engineering Guide #16.

1.g Emission Limitation:

0.25 lb of VOC per hour

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly refinery fuel gas or natural gas combustion rate, in million standard cubic feet per hour, by the appropriate VOC emission factor, in pound(s) per million standard cubic feet, from AP-42 Chapter 1.4 (7/98), and then dividing by the maximum heat input to the coker furnace. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Methods 1 through 4 and Method 18, 25, or 25A of 40 CFR Part 60, Appendix A.

2. 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 1 year after permit issuance.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates of 0.13 lb of NOx per million Btu of actual heat input, 22.88 lbs of NOx per hour, and 7.22 lbs of CO per hour.

c. The following test methods shall be employed to demonstrate compliance:

i. For the allowable mass emission rates of 0.13 lb of NOx per million Btu of actual heat input, and 22.88 lbs of NOx per hour:

Method 7 of 40 CFR, Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

ii. For the allowable mass emission rate of 7.22 lbs of CO per hour:

Method 10 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 appropriate Ohio EPA District Office or local air agency.

2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. 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).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Roadways (F001)
Activity Description: Paved and Unpaved Roadways

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
paved and unpaved roadways	OAC rule 3745-17-07(B)	none See section A.I.2.a.
	OAC rule 3745-17-08(B)	none See section A.I.2.b.

2. Additional Terms and Conditions

2.a This emissions unit is exempt from the visible emissions limitations specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e).

2.b This facility is not located within the areas identified in "Appendix A" of OAC rule 3745-17-08 (it is located outside of the Lima, Ohio city limits). Therefore, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Loading Rack (J001)
Activity Description: Propylene Truck Loading/Unloading Facilities

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
propane and propylene truck loading/unloading facilities	OAC rule 3745-21-07(E)	exempt See section A.I.2.a.

2. Additional Terms and Conditions

2.a This emissions unit is exempt from the requirements of OAC rule 3745-21-07(E) pursuant to the requirements of OAC rule 3745-21-07(A)(1). This facility is not located in one of the Priority 1 counties identified in OAC rule 3745-21-06(A).

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Loading Rack (J002)
Activity Description: Propylene Railcar Loading/Unloading Facilities

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
propane and propylene railcar loading/unloading facilities	OAC rule 3745-21-07(E)	exempt See section A.I.2.a.

2. Additional Terms and Conditions

2.a This emissions unit is exempt from the requirements of OAC rule 3745-21-07(E) pursuant to the requirements of OAC rule 3745-21-07(A)(1). This facility is not located in one of the Priority 1 counties identified in OAC rule 3745-21-06(A).

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Process (P002)
Activity Description: SRU MEA Unit: Gas Amine Contactor (PR 164171), LPG Amine Contactor (PR 164170), Amine Stripper (PR 164172)

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
sulfur recovery unit, MEA unit - gas amine contactor, LPG amine contactor, amine stripper	OAC rule 3745-18-08(C)(3)	100 lbs of sulfur dioxide (SO2) per 1,000 lbs of sulfur processed at the Claus unit (See section A.I.2.a.)
	40 CFR Part 63, Subpart CC	See section A.I.2.b.
	40 CFR Part 63, Subpart UUU 40 CFR Part 63.1563(b)	See section A.I.2.c.
	40 CFR Part 63.1563(e)	See section A.I.2.d.
	40 CFR Part 63.1568(a)	See section A.I.2.e.
	40 CFR Part 63.1577	See section A.I.2.f.
	40 CFR Part 63.1569(a)	See sections A.I.2.g. and A.I.2.h.

2. Additional Terms and Conditions

2.a The emission limitation of 100 lbs of SO2 per 1,000 lbs of sulfur processed at the Claus unit is for emissions units P002, P011, and P015, combined. For a specific period of time, the amount of sulfur processed is equal to the amount of sulfur entering the Claus

unit plus the amount of any sulfur bypassed to the flare(s) from the amine unit and/or the sour water stripper. The bypassing of any significant hydrogen sulfide gases from the amine unit and/or the sour water stripper to the flare(s) is a violation of the allowable SO_2 emission rate.

2.b Pursuant to the Group 1 miscellaneous process vent requirements in 40 CFR 63.641, the permittee shall reduce emissions of organic HAP's using a flare (emissions unit P006) that meets the requirements of 40 CFR 63.11(b) of subpart A. Terms and conditions for this flare are contained in the terms and conditions for emissions unit P006.

2.c The permittee shall comply with the emission limitations and work practice standards for existing emissions units in 40 CFR Part 63, Subpart UUU by no later than April 11, 2005 unless an extension of compliance is granted under 40 CFR Part 63.1563(c).

2.d The permittee must meet the notification requirements in 40 CFR Part 63.1574 [see section A.IV.] according to the schedule in 40 CFR Part 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 Subpart UUU.

2.e The permittee must meet each emission limitation in Table 29 of this subpart that applies to this emissions unit. If the sulfur recovery unit isn't subject to the NSPS for sulfur oxides, the permitte can choose from the options in 63.1568(a)(1)(i) through (ii) of this section:

i. [63.1568(a)(1)(i)]
The permittee can elect to meet the NSPS requirements (Option 1); or

ii. [63.1568(a)(1)(i)]
The permittee can elect to meet the total reduced sulfur (TRS) emission limitation (Option 2).

2.f Table 44 of [see section A.VI.] shows which parts of the General Provision in 40 CFR Part 63.1 through 63.15 apply to this emissions unit.

2.g [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.h [63.1569(a)(2)]
As provided in 40 CFR Part 63.6(g), the US 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. The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward.

   [63.1568(a)] REQUIREMENTS FOR HAP EMISSIONS FROM SULFUR RECOVERY UNITS

   a. [63.1568(a)(2)]
   The permittee must meet each operating limit in Table 30 [see section A.VI.] that applies to this emissions unit.

   b. [63.1568(a)(3)]
   The permittee must prepare an operation, maintenance, and monitoring plan according to the requirements in 40 CFR Part 63.1574(f) [see section A.IV.] and operate at all times according to the procedures in the plan.

2. [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 Part 63.1574(f) [see section A.IV.] and operate at all times according to the procedures in the plan.

III Monitoring and/or Recordkeeping

1. The permittee shall maintain daily records of the following information, while the emissions unit is in operation:

   a. the total amount of sulfur processed (see A.I.2.a);

b. the total SO_2 emissions, in pounds, from the Claus unit and the flare(s); and

c. the average SO_2 emission rate, in pound of SO_2 per pound of sulfur processed.

2. In order to demonstrate compliance with the emission limitations of 100 lbs of SO2/1,000 lbs of sulfur processed at the Claus unit, the permittee shall operate and maintain an instrument for continuously monitoring and recording the SO2 emission rate in terms of the applicable standards for emissions units P002, P011 and P015, combined. The monitoring shall be conducted in accordance with 40 CFR 60.13, as follows:

   a. The span value for this instrument is 125 percent of the applicable SO2 emission limitation.

   b. The performance evaluations for this SO2 monitor under 40 CFR 60.13 shall use Performance Specification 2 of 40 CFR Part 60, Appendix B.

      The permittee shall conduct an annual relative accuracy test audit (RATA) for the SO2 continuous emission monitoring equipment. Method 6 of 40 CFR Part 60, Appendix A, or other approved U.S. EPA methods shall be used for conducting the annual RATAs.

3. A statement of certification of the existing SO2 continuous emission monitoring system (CEMS) 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 2. Proof of certification shall be made available to representatives of the appropriate Ohio EPA District Office or local air agency upon request.

4. The permittee shall maintain records of all data obtained by the continuous SO2 CEMS including, but not limited to, parts per million SO2 on an instantaneous (1-minute) basis, emissions of SO2 in units of the applicable standard (lb/1,000 lbs of sulfur processed) as a rolling, 30-day average, the results of daily zero/span calibration checks, and the magnitudes of manual calibration adjustments.

5. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the SO2 CEMS designed to ensure continuous valid and representative readings of SO2. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous SO2 monitoring system must be kept on site and available for inspection during regular office hours.

6. The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward.

[63.1570] GENERAL COMPLIANCE REQUIREMENTS - 40 CFR Part 63, Subpart UUU

a. [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 Part 63.6(f)(1).

b. [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 Part 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.

c. [63.1570(d)]
The permittee must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in 40 CFR Part 63.6(e)(3).

d. [63.1570(e)]
During periods of startup, shutdown, and malfunction, the permittee must operate in accordance with the SSMP.

e. [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 Part 63.1575 [see section A.IV.].

f. [63.1570(g)]
Consistent with 40 CFR Part 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 Part 63.6(e) and the contents of the SSMP.

7. [63.1572] MONITORING, INSTALLATION, OPERATION, AND MAINTENANCE REQUIREMENTS [Tables 40 and 41] - 40 CFR Part 63, Subpart UUU

a. [63.1572(a)]
The permittee must install, operate, and maintain each continuous emission monitoring system according to the requirements in 40 CFR Part 63.1572(a)(1) through (4) [paragraphs a.i. through a.iv. of this section].

i. [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.].

ii. [63.1572(a)(2)]
If the permittee uses a continuous emission monitoring system to meet the NSPS CO or SO2 limit, the permittee must conduct a performance evaluation of each continuous emission monitoring system according to the requirements in 40 CFR Part 63.8. This requirement does not apply to an affected emissions unit subject to the NSPS that has already demonstrated initial compliance with the applicable performance specification.

iii. [63.1572(a)(3)]
As specified in 40 CFR Part 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.

iv. [63.1572(a)(4)]
Data must be reduced as specified in 40 CFR Part 63.8(g)(2).

b. [63.1572(d)]
The permittee must monitor and collect data according to the requirements in 40 CFR Part 63.1572(d)(1) and (d)(2) [see paragraph b.i. and b.ii. of this section].

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 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.

8. [63.1576] RECORD KEEPING REQUIREMENTS - 40 CFR Part 63, Subpart UUU

a. [63.1576(a)]
The permittee must keep the records specified in 63.1576(a)(1) through (3) [paragraphs a.i through a.iii. of this section].

i. [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 Part 63.10(b)(2)(xiv).

ii. [63.1576(a)(2)]
The records in 40 CFR Part 63.6(e)(1)(iii) through (v) related to startup, shutdown, and malfunction.

iii. [63.1576(a)(3)]
Records of performance tests, performance evaluations, and visible emission observations as required in 40 CFR Part 63.10(b)(2)(viii).

b. [63.1576(b)]
For each continuous emission monitoring system and continuous opacity monitoring system, the permittee must keep the records required in 63.1576(b)(1) through (5) [paragraphs b.i. through b.v. of this section].

i. [63.1576(b)(1)]
Records described in 40 CFR Part 63.10(b)(2)(vi) through (xi) of Subpart A.

ii. [63.1576(b)(2)]
Monitoring data for continuous opacity monitoring systems during a performance evaluation as required in 40 CFR Part 63.6(h)(7)(i) and (ii) of Subpart A.

iii. [63.1576(b)(3)]
Previous (i.e., superceded) versions of the performance evaluation plan as required in 40 CFR Part 63.8(d)(3) of Subpart A.

iv. [63.1576(b)(4)]
Requests for alternatives to the relative accuracy test for continuous emission monitoring systems as required in 40 CFR Part 63.8(f)(6)(i) of Subpart A.

v. [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.

c. [63.1576(c)]
The permittee must keep the records in 40 CFR Part 63.6(h) for visible emission observations.

d. [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.

e. [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.

f. [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.

g. [63.1576(g)]
The records must be in a form suitable and readily available for expeditious review according to 40 CFR Part 63.10(b)(1).

h. [63.1576(h)]
As specified in 40 CFR Part 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.

i. [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 Part 63.10(b)(1). The permittee can keep the records offsite for the remaining 3 years.

IV Reporting Requirements

1. The permittee shall submit quarterly excess emission and data assessment reports to the appropriate Ohio EPA District Office or local air agency by January 30, April 30, July 30 and October 30 of each year detailing the data obtained from the CEMS of the SRU during the previous quarter. The report shall include the percent availability of the SRU, the dates, duration, amounts (tons), and points of emission of excess sulfur dioxide emissions that are caused by malfunctions or shutdowns of the amine unit, sour water stripper, or the SRU, and an analysis of the cause of and corrective action taken for each malfunction (including any bypassing of the amine-claus SRU to the refinery flare system) or shutdown. The report shall also include all instances of daily SO2 values in excess of the limitation specified in OAC rule 3745-18-08(C)(3).

2. The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any SO2 CEMS 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 source 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 the quarterly report.

3. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) on a quarterly basis, in writing, of all rolling, 30-day periods during which the average SO2 emissions as measured by the SO2 CEMS under 40 CFR 60.13 exceeds 100 lbs of SO2 per 1,000 lbs of sulfur processed at the Claus unit. The rolling, 30-day average shall be determined as the arithmetic average of 30 contiguous 24-hour averages. The notification shall include a copy of the record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) by January 30, April 30, July 30 and October 30 of each year and shall address the data obtained during the previous calendar quarters. These reports shall also contain the total SO2 emissions for the calendar quarter (in tons).

4. If there are no excess SO2 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.

5. The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward except as stated in 40 CFR Part 63.1574 which may have reports due before April 11, 2005.

[63.1574] NOTIFICATION SUBMITTAL - 40 CFR Part 63, Subpart UUU

a. [63.1574(a)]
Except as allowed in 40 CFR Part 63.1574(a)(1) through (a)(3) [paragraphs a.i. through a.iii. of this section], the permittee must submit all of the notifications in 40 CFR Part 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.

i. [63.1574(a)(1)]
The permittee must submit the notification of the intention to construct or reconstruct according to 40 CFR Part 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 Part 63.5(d)(1)(i) and 63.5(f)(2).

ii. [63.1574(a)(2)]
The permittee must submit the notification of intent to conduct a performance test required in 40 CFR Part 63.7(b) at least 30 calendar days before the performance test is scheduled to begin (instead of 60 days).

iii. [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 Part 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.

(a) [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.

b. [63.1574(c)]
As specified in 40 CFR Part 63.9(b)(3), if the permittee starts the new or reconstructed affected emissions unit on or after April 11, 2002, the permittee must submit the initial notification no later than 120 days after April 11, 2005.

c. [63.1574(d)]
The permittee also must include the information in Table 42 [see section A.VI.] in the notification of compliance status.

d. [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 emissions unit, 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 appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency for review and approval and comply with the plan until the change is approved.

ii. [63.1574(f)(2)]
Each plan must include, at a minimum, the applicable information as specified in 40 CFR Part 63.1574(f)(2)(i) through (x) [paragraphs d.ii.(a) through d.ii.(e) of this section].

(a) [63.1574(f)(2)(i)]
Process and control device parameters to be monitored for each affected emissions unit, 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 emissions unit.

(c) [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).

(d) [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 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.

(e) [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.

6. [63.1575] REPORTS FOR 40 CFR Part 63, Subpart UUU

a. [63.1575(a)]
The permittee must submit each report in Table 43 [see section A.VI.] that applies to this emissions unit.

b. [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 Part 63.1575(b)(1) through (b)(5) [see paragraphs b.i. through b.v. of this section].

i. [63.1575(b)(1)]
The first compliance report must cover the period beginning April 11, 2005 and ending on June 30, 2005.

ii. [63.1575(b)(2)]
The first compliance report must be postmarked or delivered no later than July 31, 2005.

iii. [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.

iv. [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.

v. [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 paragraphs b.i. through b.iv. of this section].

c. [63.1575(c)]
The compliance report must contain the following information:

i. [63.1575(c)(1)]
Company name and address.

ii. [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.

iii. [63.1575(c)(3)]
Date of report and beginning and ending dates of the reporting period.

iv. [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.

d. [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) [paragraphs c.i. through c.iii. of this section] and the information in 63.1575(d)(1) through (d)(3) [paragraphs d.i. through d.iii. of this section].

i. [63.1575(d)(1)]
The total operating time of each affected emissions unit during the reporting period.

ii. [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.

iii. [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).

e. [63.1575(e)]
For each deviation from an emission limitation occurring at an affected emissions unit where a continuous opacity monitoring system or a continuous emission monitoring system is used to comply with the emission limitation, the permittee must include the information in 40 CFR Part 63.1575(d)(1) through(3) [paragraphs d.i. through d.iii. of this section] and the information in 63.1575(e)(1) through (13) [paragraphs e.i through e.xiii. of this section].

i. [63.1575(e)(1)]
The date and time that each malfunction started and stopped.

ii. [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.

iii. [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 Part 63.8(c)(8) of Subpart A.

iv. [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.

v. [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.

vi. [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.

vii. [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.

viii. [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.

ix. [63.1575(e)(9)]
An identification of each HAP that was monitored at the affected emissions unit.

x. [63.1575(e)(10)]
A brief description of the process units.

xi. [63.1575(e)(11)]
The monitoring equipment manufacturer(s) and model number(s).

xii. [63.1575(e)(12)]
The date of the latest certification or audit for the continuous opacity monitoring system or continuous emission monitoring system.

xiii. [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.

f. [63.1575(f)]
The permittee also must include the information required in 63.1575(f)(1) through (f)(2) [paragraphs f.i. and f.ii. of this section] in each compliance report, if applicable.

i. [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.

ii. [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.

g. [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.

h. [63.1575(h)]
The reporting requirements in paragraphs 63.1575(h)(1) and (2) [paragraphs h.i. and h.ii. of this section] apply to startups, shutdowns, and malfunctions:

i. [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 Part 63.6(e)(3)(iii) and 63.10(d)(5) do not apply.

ii. [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 Part 63.6(e)(3)(iv) and 63.10(d)(5) do not apply.

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:

1.a Emission Limitation:

100 lbs of SO2 per 1,000 lbs of sulfur processed at the Claus unit for emissions units P002, P011, and P015, combined

Applicable Compliance Method:

Compliance shall be based upon the results of the continuous emission monitoring as required in section A.III. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with Method 6 of 40 CFR Part 60, Appendix A.

2. 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.

[63.1568] DEMONSTRATING COMPLIANCE WITH THE WORK PRACTICE STANDARDS AND EMISSION LIMITATIONS FROM SULFUR RECOVERY UNITS

a. [63.1568(b)] DEMONSTRATING INITIAL COMPLIANCE
The permittee must:

i. [63.1568(b)(1)]
Install, operate, and maintain a continuous monitoring system according to the requirements in 40 CFR Part 63.1572 [see section A.III.] and Table 31 [see section A.VI.].

ii. [63.1568(b)(2)]
Conduct each performance test for a sulfur recovery unit not subject to the NSPS for sulfur oxides according to the requirements in 40 CFR Part 63.1571 [see section A.V.] and under the conditions specified in Table 32 [see section A.VI.].

iii. [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.].

iv. [63.1568(b)(4)]
Correct the reduced sulfur samples to zero percent excess air using Equation 1 of this section as follows:

(Eq. 1)

Cadj = Cmeas [20.9c / (20.9 - %O2)]

where:

Cadj = pollutant concentration adjusted to zero percent oxygen, ppm or g/dscm;
Cmeas = pollutant concentration measured on a dry basis, ppm or g/dscm;
20.9c = 20.9 percent oxygen?0.0 percent oxygen (defined oxygen correction basis), percent;
20.9 = oxygen concentration in air, percent; and
%O2 = oxygen concentration measured on a dry basis, percent.

v. [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.].

vi. [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 appropriate Ohio EPA District Office or local air agency as part of the notification of compliance status.

vii. [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 Part 63.1574 [see section A.IV.].

b. [63.1568(c)] DEMONSTRATING CONTINUOUS COMPLIANCE
The permittee must

i. [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.

ii. [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.

3. [63.1569(b)] DEMONSTRATING INITIAL COMPLIANCE WITH THE HAP EMISSION LIMITATIONS FROM BYPASS LINES - 40 CFR Part 63, Subpart UUU

a. [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 Part 63.1571 [see section A.V.] and under the conditions specified in Table 37 [see section A.VI.].

b. [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.].

c. [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 appropriate Ohio EPA District Office or local air agency as part of the notification of compliance status.

d. [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 Part 63.1574 [see section A.IV.].

4. [63.1569(c)] DEMONSTRATING CONTINUOUS COMPLIANCE WITH THE WORK PRACTICE STANDARDS FOR BYPASS LINES - 40 CFR Part 63, Subpart UUU

a. [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.].

b. [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.

5. [63.1571] PERFORMANCE TEST AND OTHER INITIAL COMPLIANCE DEMONSTRATION - 40 CFR Part 63, Subpart UUU

a. [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 Part 63.6(a)(2) of Subpart A.

i. [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.

ii. [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.

b. [63.1571(b)] GENERAL REQUIREMENTS FOR PERFORMANCE TESTS AND PERFORMANCE EVALUATIONS
The permittee must:

i. [63.1571(b)(1)]
Conduct each performance test according to the requirements in 40 CFR Part 63.7(e)(1).

ii. [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 Part 63.7(e)(3). Each test run must last at least 1 hour.

iii. [63.1571(b)(3)]
Conduct each performance evaluation according to the requirements in 40 CFR Part 63.8(e).

iv. [63.1571(b)(4)]
Not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in 40 CFR Part 63.7(e)(1).

c. [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 appropriate Ohio EPA District Office or local air agency. An engineering assessment may include the approaches listed in 40 CFR Part 63.1571(c)(1) through (c)(4) [paragraphs c.i. through c.iv. of this section]. Other engineering assessments may be used but are subject to review and approval by the appropriate Ohio EPA District Office or local air agency**.**

i. [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;

ii. [63.1571(c)(2)]
The permittee may use bench-scale or pilot-scale test data representative of the process under representative operating conditions;

iii. [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

iv. [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:

(a) [63.1571(c)(4)(i)]
Use of material balances based on process stoichiometry to estimate maximum TOC concentrations;

(b) [63.1571(c)(4)(ii)]
Calculation of hourly average maximum flow rate based on physical equipment design such as pump or blower capacities; and

(c) [63.1571(c)(4)(iii)]
Calculation of TOC concentrations based on saturation conditions.

d. [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 the Notification of Compliance Status, demonstrating to the satisfaction of the appropriate Ohio EPA District Office or local air agency, that the affected emissions unit complies with the applicable emission limit at the operating limit based on adjusted values.

e. [63.1571(e)]
The permittee may change the established operating limit by meeting the requirements in 63.1571(e)(1) through (2) [paragraphs e.i. through e.ii. of this section].

i. [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.

ii. [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) [paragraph e.i. of this section].

VI Miscellaneous Requirements

1. For all references to the tables in 40 CFR Part 63, Subpart UUU, see the attached document entitled "Attachment #2 (SRU)".

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Process (P004)
Activity Description: Trolumen fume burner (PR 175011) with two oxidizer tanks (PR 100087/88)

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
refinery fuel gas fired Trolumen fume burner with two oxidizer tanks	OAC rule 3745-18-08(C)(4)	11.0 lbs of sulfur dioxide (SO2) per ton of product
	OAC rule 3745-17-11(B)(1)	none (See A.I.2.a)
	OAC rule 3745-17-07(A)	none (See A.I.2.b.)

2. Additional Terms and Conditions

2.a The uncontrolled mass rate of particulate emissions (PE)* from this emissions unit is less than 10 pounds/hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight rate is equal to zero. "Process weight" is defined in OAC rule 3745-17-01(B)(14).

* The burning of refinery fuel gas is the only source of PE from this emissions unit.

2.b This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. The permittee shall conducting sampling and analysis for the Trolumen fume burner in accordance with Technical Service Response No. 6568 for the purpose of calculating SO2 emissions. The sampling and analysis shall be conducted on a monthly basis, as follows:

1.a Sample Collection of Feed:

i. Collect three one-quart samples of the feed charged to Tank 87 or 88 during the heat ramp cycle, but before oxidation (air purge) has started.

ii. Open the tank draw valve at the base of the tank and purge the sample line for two minutes into a bucket.

iii. Collect the three one-quart samples from the tank draw valve. Use wide-mouth quart cans (new paint cans), if possible, for sample containers.

1.b Sample Collection of Trolumen Product:

i. After oxidation is completed (5 to 7 days), collect three one-quart grab samples of the Trolumen product.

ii. Make sure that the Trolumen product sent to the belt conveyor for flaking is being pumped from the same tank that the initial feed samples were taken.

iii. Collect three one-quart samples from the belt conveyor. Use wide-mouth quart cans (new paint cans), if possible, for sample containers.

1.c Sample Labeling and Shipment:

i. Samples should be labeled with feed type, product type, tank number and date.

ii. Ship feed and product samples together to the appropriate laboratory for analysis.

1.d Sample Analysis:

i. One each of the feed and product samples will be submitted for sulfur analyses with the replicates being reserved as back-up samples.

ii. The submitted samples will be analyzed by the LECO SC-132 sulfur analyzer on two different days with three separate measurements of each sample on each day.

1.e Material Balance Calculation:

The following equations shall be used to determine the sulfur dioxide emissions, in lb of SO2/ton of product:

i. (percent sulfur content difference between feed sample and product sample)(tons of Trolumen product)(2,000 lbs/ton) = lbs of sulfur

ii. (lbs of sulfur)(64/32) = lbs of SO2, where 64 is the molecular weight of SO2 and 32 is the molecular weight of sulfur

iii. divide the lbs of SO2 by the tons of Trolumen product produced

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the SO2 emission limitation of 11.0 lbs per ton of product. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

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:

1.a Emission Limitation:

11.0 lbs of SO2 per ton of product

Applicable Compliance Method:

The permittee shall demonstrate compliance with the lbs/ton limitation by calculating the SO2 emissions using the material balance method as described in Technical Service Response #6568, which shall be kept on file at the facility. If required, the permittee shall demonstrate compliance with the SO2 emission limitation by using Method 6 of 40 CFR Part 60, Appendix A, or other approved USEPA methods.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Process (P005)
Activity Description: Two coker drums (PR164237/164238) and distillation column (PR164903)

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
two coker drums (PR 164237/164238) and distillation column (PR 164903) with coker drum blowdown absorber and flare	OAC rule 3745-18-06(E)(2)	1,143 lbs of sulfur dioxide (SO2)/hr (see A.I.2.a)
	OAC rule 3745-17-11(B)(1)	none (See A.I.2.c)
	OAC rule 3745-17-07(A)	none (See A.I.2.d)
	OAC rule 3745-21-07(G)	exempt (See A.I.2.e)

2. Additional Terms and Conditions

2.a The allowable SO2 emission limitation is based on the equation in OAC rule 3745-18-06(E)(2) and a maximum process weight rate of 228.8 tons per hour.

2.b All VOC emissions from the distillation column and coker drum blowdown absorber shall be vented to the FCC flare, emissions unit P006. Monitoring, record keeping and reporting requirements for the FCC flare are listed in the terms and conditions for emissions unit P006.

2.c The uncontrolled mass rate of particulate emissions (PE)* from this emissions unit is less than 10 pounds/hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11

does not apply because the process weight rate is equal to zero. "Process weight" is defined in OAC rule 3745-17-01(B)(14).

* The burning of refinery fuel gas in the flare is the only source of PE from this emissions unit.

2.d This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

2.e This emissions unit is exempt from the requirements of OAC rule 3745-21-07(G) pursuant to the requirements of OAC rule 3745-21-07(A)(1). This facility is not located in one of the Priority 1 counties identified in OAC rule 3745-21-06(A).

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

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:

1.a Emission Limitation:

1,143 lbs of SO2/hr

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based on the results of the most recent emission test. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with the requirements specified in Methods 1 through 4 and Method 6 of 40 CFR Part 60, Appendix A.

2. 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 after issuance of this permit and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for SO2.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for SO2, Methods 1 through 4 and Method 6 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 appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. 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).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Refinery Flare (P006)
Activity Description: FCC/Coker Flare (PR 196128), treated as control equipment

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
FCC/coker flare, steam-assisted (PR 196128)	40 CFR 63.11(b)(4)	no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours
	40 CFR 63.11(b)(2) through 40 CFR 63.11(b)(3), and 40 CFR 63.11(b)(5) through 40 CFR 63.11(b)(7)	see A.II.1. through A.II.9.

2. Additional Terms and Conditions

2.a None

II Operational Restrictions

1. The flare shall be operated at all times when emissions may be vented to it.

2. The flare shall be operated with a pilot flame present at all times.

3. The permittee has the choice of adhering to the heat content specifications in 40 CFR 63.11(b)(6)(ii), and the maximum tip velocity specifications in 40 CFR 63.11(b)(7) or 40 CFR 63.11(b)(8), or adhering to the requirements in 40 CFR 63.11(b)(6)(i).

4. [40 CFR 63.11(b)(6)(i)(A)]
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 Vmax, as determined by the following equation:

Vmax = (XH2 minus K1) * K2

Where:

Vmax = Maximum permitted velocity, m/sec

K1 = Constant, 6.0 volume-percent hydrogen

K2 = Constant, 3.9 (m/sec)/volume-percent hydrogen

XH2 = 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)

5. [40 CFR 63.11(b)(6)(i)(B)]
The actual exit velocity of a flare shall be determined by the method specified in 40 CFR 63.11(b)(7)(i).

6. [40 CFR 63.11(b)(6)(ii)]
The flare shall be used only with the net heating value of the gas being combusted at 11.2 MJ/scm (300 Btu/scf) or greater (for steam-assisted flare). The net heating value of the gas being combusted in the flare shall be calculated using the following equation:

HT = K*(summation of i=1,n)*Ci*Hi

Where:
HT = Net heating value of the sample, in MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25 degrees Celsius and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 degrees Celsius.

K = Constant = 1.740 x 10^-7(1/ppmv)(g-mole/scm)(MJ/kcal)
where the standard temperature for (g-mole/scm) is 20 degrees Celsius

Ci = Concentration of sample component i in ppmv on a wet basis, as measured for organics by Test Method 18 and measured for hydrogen and carbon monoxide by American Society for Testing and Materials (ASTM) D1946-77 or 90 (Reapproved 1994) (incorporated by reference as specified in 40 CFR 63.14)

Hi = Net heat of combustion of sample component i, kcal/g-mole at 25 degrees Celsius and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95 (incorporated by reference as specified in 40 CFR 63.14) if published values are not available or cannot be calculated.

n = Number of sample components

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

8. [40 CFR 63.11(b)(7)(ii)]
Steam-assisted flares designed for and operated with an exit velocity, as determined by the method specified in 40 CFR 63.11(b)(7)(i), 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).

9. [40 CFR 63.11(b)(7)(iii)]
Steam-assisted flares designed for and operated with an exit velocity, as determined by the method specified in 40 CFR 63.11(b)(7)(i), less than the velocity Vmax, as determined by the method specified in this paragraph, but less than 122 m/sec (400 ft/sec) are allowed. The maximum permitted velocity, Vmax, for flares complying with this paragraph shall be determined by the following equation:

$$\text{Log10}(V_{max}) = (HT+28.8)/31.7$$

Where:

Vmax = Maximum permitted velocity, m/sec

28.8 = constant

31.7 = constant

HT = The net heating value as determined in paragraph (b)(6) of this section

III Monitoring and/or Recordkeeping

1. The permittee shall operate and maintain 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 flare pilot flame. All monitoring equipment shall be calibrated, maintained, and operated according to manufacturer's specifications.

2. The permittee shall record the following information each day:

   a. all periods during which the flare was not operating and emissions were vented to it;

   b. all periods during which there was no pilot flame;

   c. the operating times for the flare and the continuous monitoring for flame presence; and

   d. all periods during which there were visible emissions from the flare, except for periods not to exceed a total of 5 minutes in any consecutive 2-hour period.

3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the flare serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall record visible emissions, using Method 22, for at least 10 consecutive minutes and shall also note the following in the operations log:

   a. the color of the emissions;
   b. whether the emissions are representative of normal operations;
   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
   d. the total duration of any visible emission incident; and
   e. any corrective actions taken to eliminate the visible emissions.

4. The permittee shall keep up-to-date records of the following information:

   a. flare design (i.e., steam-assisted, air-assisted, or non-assisted); and

   b. all visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations made during any compliance determinations.

5. [40 CFR 63.654(i)(3)]

5.a Each permittee required to continuously monitor operating parameters under 40 CFR 63.644 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 (i)(3)(i) through (i)(3)(v) of 40

CFR 63.644 unless an alternative recordkeeping system has been requested and approved under paragraph (h) of 40 CFR 63.644.

i. The monitoring system shall measure data values at least once every hour.

ii. The permittee shall record either:

(1) Each measured data value; or

(2) 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. Daily average values of each continuously monitored parameter shall be calculated for each operating day and retained for 5 years except as specified in paragraph (i)(3)(iv) of 40 CFR 63.644.

(1) 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.

(2) 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. 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 paragraph (i)(3)(ii) of 40 CFR 63.644 shall also be retained for 5 years.

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 this subpart. 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.

5.b All other information required to be reported under paragraphs (a) through (h) of 40 CFR 63.654 shall be retained for 5 years.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods during which the flare pilot flame was not functioning properly or the flare had visible emissions exceeding a total of 5 minutes in any consecutive 2-hour period. The reports shall include the date, time, and duration of each such period, as well as reasons for each such deviation.

2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the flare serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitation and operational restrictions in sections A.I.1, and A.II.2 through A.II.9 shall be determined in accordance with the following methods:

1.a Emission Limitation:

no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours

Applicable Compliance Method:

The test method employed to demonstrate compliance with the emission limitation shall be Method 22, which is located in 40 CFR Part 60, Appendix A.

1.b Operational Restriction:

The flare shall be used only with the net heating value of the gas being combusted at 300 Btu/scf or greater.

Applicable Compliance Method:

The net heating value of the gas being combusted in the flare shall be calculated using the following equation:

HT (MJ/scm*) = K (Sum)

where:

HT = net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25 degrees Celsius and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 degrees Celsius;

K = constant = 1.740x10^-7 (1/ppmv)(g-mole/scm)(MJ/kcal); and
Sum = the summation from i=1 to i=n of the gas being combusted (Ci)(Hi)

where:

the standard temperature for (g-mole/scm) is 20 degrees Celsius;

n = number of sample components;

Ci = concentration of sample component i in ppmv on a wet basis, as measured for organics by Test Method 18 and measured for hydrogen and carbon monoxide by American Society for Testing and Materials (ASTM) D1946-77 or 90 (reapproved 1994)(incorporated by reference as specified in 40 CFR Part 63.14); and

Hi = Net heat of combustion of sample component i, kcal/g-mole at 25 degrees Celsius and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95 (incorporated by reference as specified in 40 CFR Part 63.14) if published values are not available or cannot be calculated.

* 1 MJ/scm = 26.81 BTU/scf

If required, the permittee shall determine the net heating value of the gas being combusted in the flare using the methods and procedures specified in 40 CFR Part 63.11(b)(6).

1.c Operational Restriction:

(one of three possible operational restrictions for a steam-assisted flare; compliance with A.V.1.c, A.V.1.d, or A.V.1.e is required)

The flare shall be designed and operated with an exit velocity of less than 60 ft/sec.

Applicable Compliance Method:

The actual exit velocity of the flare shall be determined by dividing the volumetric flow rate of gas being combusted (in units of emission standard temperature and pressure), as determined by Test Method 2, 2A, 2C, or 2D in 40 CFR Part 60, Appendix A, by the unobstructed (free) cross-sectional area of the flare tip. If required, the permittee shall determine the actual exit velocity of the flare using the methods and procedures specified in 40 CFR Part 63.11(b)(7).

1.d Operational Restriction:

(one of three possible operational restrictions for a steam-assisted flare; compliance with A.V.1.c, A.V.1.d, or A.v.1.e is required)

The flare shall be designed and operated with an exit velocity equal to or greater than 60 ft/sec, but less than 400 ft/sec if the net heating value of the gas being combusted is greater than 1000 Btu/scf.

Applicable Compliance Method:

The actual exit velocity of the flare shall be determined by dividing the volumetric flow rate of gas being combusted (in units of emission standard temperature and pressure), as determined by Test Method 2, 2A, 2C, or 2D in 40 CFR Part 60, Appendix A, by the unobstructed (free) cross-sectional area of the flare tip. If required, the permittee shall determine the actual exit velocity of the flare using the methods and procedures specified in 40 CFR Part 63.11(b)(7).

1.e Operational Restriction:

(one of three possible operational restrictions for a steam-assisted flare; compliance with A.V.1.c, A.V.1.d, or A.v.1.e is required)

The flare shall be designed and operated with an exit velocity less than the velocity, VMAX, but less than 400 ft/sec.

Applicable Compliance Method:

The maximum permitted velocity, VMAX, shall be determined by the following equation:

Log 10(VMAX) = (HT + 28.8)/31.7

where:

VMAX = maximum permitted velocity, m/sec

HT = the net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25 degrees Celsius and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 degrees Celsius

28.8 = Constant

31.7 = Constant

If required, the permittee shall determine the actual exit velocity of the flare using the methods and procedures specified in 40 CFR Part 63.11(b)(7).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Refinery Flare (P007)
Activity Description: LIU Flare (PR 196510), treated as control equipment

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
LIU flare, steam-assisted (PR 196510)	40 CFR 63.11(b)(4)	no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours
	40 CFR 63.11(b)(2) through 40 CFR 63.11(b)(3), and 40 CFR 63.11(b)(5) through 40 CFR 63.11(b)(7)	See sections A.II.1 through A.II.9.

2. Additional Terms and Conditions

2.a None

II Operational Restrictions

1. The flare shall be operated at all times when emissions may be vented to it.

2. The flare shall be operated with a pilot flame present at all times.

3. The permittee has the choice of adhering to the heat content specifications in 40 CFR 63.11(b)(6)(ii), and the maximum tip velocity specifications in 40 CFR 63.11(b)(7) or 40 CFR 63.11(b)(8), or adhering to the requirements in 40 CFR 63.11(b)(6)(i).

4. [40 CFR 63.11(b)(6)(i)(A)]
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 Vmax, as determined by the following equation:

Vmax = (XH2 minus K1) * K2

where:

Vmax = Maximum permitted velocity, m/sec;

K1 = Constant, 6.0 volume-percent hydrogen;

K2 = Constant, 3.9 (m/sec)/volume-percent hydrogen; and

XH2 = 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).

5. [40 CFR 63.11(b)(6)(i)(B)]
The actual exit velocity of a flare shall be determined by the method specified in 40 CFR 63.11(b)(7)(i).

6. [40 CFR 63.11(b)(6)(ii)]
The flare shall be used only with the net heating value of the gas being combusted at 11.2 MJ/scm (300 Btu/scf) or greater (for steam-assisted flare). The net heating value of the gas being combusted in the flare shall be calculated using the following equation:

HT = K*(summation of i=1,n)*Ci*Hi

where:

HT = Net heating value of the sample, in MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25 degrees Celsius and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 degrees Celsius;

K = Constant = 1.740 x 10^-7(1/ppmv)(g-mole/scm)(MJ/kcal)
where the standard temperature for (g-mole/scm) is 20 degrees Celsius;

Ci = Concentration of sample component i in ppmv on a wet basis, as measured for organics by Test Method 18 and measured for hydrogen and carbon monoxide by American Society for Testing and Materials (ASTM) D1946-77 or 90 (Reapproved 1994) (incorporated by reference as specified in 40 CFR 63.14);

Hi = Net heat of combustion of sample component i, kcal/g-mole at 25 degrees Celsius and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95 (incorporated by reference as specified in 40 CFR 63.14) if published values are not available or cannot be calculated; and

n = Number of sample components.

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

8. [40 CFR 63.11(b)(7)(ii)]
Steam-assisted flares designed for and operated with an exit velocity, as determined by the method specified in 40 CFR 63.11(b)(7)(i), 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).

9. [40 CFR 63.11(b)(7)(iii)]
Steam-assisted flares designed for and operated with an exit velocity, as determined by the method specified in 40 CFR 63.11(b)(7)(i), less than the velocity Vmax, as determined by the method specified in this paragraph, but less than 122 m/sec (400 ft/sec) are allowed. The maximum permitted velocity, Vmax, for flares complying with this paragraph shall be determined by the following equation:

$$\text{Log10}(V_{max}) = (HT+28.8)/31.7$$

where:

Vmax = Maximum permitted velocity, m/sec;

28.8 = constant;

31.7 = constant; and

HT = The net heating value as determined in paragraph (b)(6) of this section.

III Monitoring and/or Recordkeeping

1. The permittee shall operate and maintain 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 flare pilot flame. All monitoring equipment shall be calibrated, maintained, and operated according to manufacturer's specifications.

2. The permittee shall record the following information each day:

   a. all periods during which the flare was not operating and emissions were vented to it;

   b. all periods during which there was no pilot flame;

   c. the operating times for the flare and the continuous monitoring for flame presence; and

   d. all periods during which there were visible emissions from the flare, except for periods not to exceed a total of 5 minutes in any consecutive 2-hour period.

3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the flare serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall record visible emissions, using Method 22, for at least 10 consecutive minutes and shall also note the following in the operations log:

   a. the color of the emissions;
   b. whether the emissions are representative of normal operations;
   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
   d. the total duration of any visible emission incident; and
   e. any corrective actions taken to eliminate the visible emissions.

4. The permittee shall keep up-to-date records of the following information:

   a. flare design (i.e., steam-assisted, air-assisted, or non-assisted); and

   b. all visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations made during any compliance determinations.

5. [40 CFR 63.654(i)(3)]

5.a Each permittee required to continuously monitor operating parameters under 40 CFR 63.644 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 (i)(3)(i) through (i)(3)(v) of 40 CFR 63.644 unless an alternative recordkeeping system has been requested and approved under paragraph (h) of 40 CFR 63.644.

i. The monitoring system shall measure data values at least once every hour.

ii. The permittee shall record either:

(1) Each measured data value; or

(2) 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. Daily average values of each continuously monitored parameter shall be calculated for each operating day and retained for 5 years except as specified in paragraph (i)(3)(iv) of 40 CFR 63.644.

(1) 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.

(2) 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. 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 paragraph (i)(3)(ii) of 40 CFR 63.644 shall also be retained for 5 years.

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 this subpart. 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.

5.b All other information required to be reported under paragraphs (a) through (h) of 40 CFR 63.654 shall be retained for 5 years.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods during which the flare pilot flame was not functioning properly or the flare had visible emissions exceeding a total of 5 minutes in any consecutive 2-hour period. The reports shall include the date, time, and duration of each such period, as well as reasons for each such deviation.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the flare serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitation and operational restrictions in sections A.I.1 and A.II.2 through A.II.9 shall be determined in accordance with the following methods:

1.a Emission Limitation:

no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours

Applicable Compliance Method:

Compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 22.

1.b Operational Restriction:

The flare shall be used only with the net heating value of the gas being combusted at 300 Btu/scf or greater.

Applicable Compliance Method:

The net heating value of the gas being combusted in the flare shall be calculated using the following equation:

HT (MJ/scm*) = K (Sum)

where:

HT = net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25 degrees Celsius and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 degrees Celsius;

K = constant = 1.740x10^-7 (1/ppmv)(g-mole/scm)(MJ/kcal); and

Sum = the summation from i=1 to i=n of the gas being combusted (Ci)(Hi);

where:

the standard temperature for (g-mole/scm) is 20 degrees Celsius;

n = number of sample components;

Ci = concentration of sample component i in ppmv on a wet basis, as measured for organics by Test Method 18 and measured for hydrogen and carbon monoxide by American Society for Testing and Materials (ASTM) D1946-77 or 90 (reapproved 1994)(incorporated by reference as specified in 40 CFR Part 63.14); and

Hi = Net heat of combustion of sample component i, kcal/g-mole at 25 degrees Celsius and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95 (incorporated by reference as specified in 40 CFR Part 63.14) if published values are not available or cannot be calculated.

* 1 MJ/scm = 26.81 BTU/scf

If required, the permittee shall determine the net heating value of the gas being combusted in the flare using the methods and procedures specified in 40 CFR Part 63.11(b)(6).

1.c Operational Restriction:

(one of three possible operational restrictions for a steam-assisted flare; compliance with A.V.1.c, A.V.1.d, or A.V.1.e is required)

The flare shall be designed and operated with an exit velocity of less than 60 ft/sec.

Applicable Compliance Method:

The actual exit velocity of the flare shall be determined by dividing the volumetric flow rate of gas being combusted (in units of emission standard temperature and pressure), as determined by Test Method 2, 2A, 2C, or 2D in 40 CFR Part 60, Appendix A, by the unobstructed (free) cross-sectional area of the flare tip. If required, the permittee shall determine the actual exit velocity of the flare using the methods and procedures specified in 40 CFR Part 63.11(b)(7).

1.d Operational Restriction:

(one of three possible operational restrictions for a steam-assisted flare; compliance with A.V.1.c, A.V.1.d, or A.v.1.e is required)

The flare shall be designed and operated with an exit velocity equal to or greater than 60 ft/sec, but less than 400 ft/sec if the net heating value of the gas being combusted is greater than 1000 Btu/scf.

Applicable Compliance Method:

The actual exit velocity of the flare shall be determined by dividing the volumetric flow rate of gas being combusted (in units of emission standard temperature and pressure), as determined by Test Method 2, 2A, 2C, or 2D in 40 CFR Part 60, Appendix A, by the unobstructed (free) cross-sectional area of the flare tip. If required, the permittee shall determine the actual exit velocity of the flare using the methods and procedures specified in 40 CFR Part 63.11(b)(7).

1.e Operational Restriction:

(one of three possible operational restrictions for a steam-assisted flare; compliance with A.V.1.c, A.V.1.d, or A.v.1.e is required)

The flare shall be designed and operated with an exit velocity less than the velocity, VMAX , but less than 400 ft/sec.

Applicable Compliance Method:

The maximum permitted velocity, VMAX , shall be determined by the following equation:

Log 10(VMAX) = (HT + 28.8)/31.7

where:

VMAX = maximum permitted velocity, m/sec;

HT = the net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25 degrees Celsius and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 degrees Celsius;

28.8 = Constant; and

31.7 = Constant.

If required, the permittee shall determine the actual exit velocity of the flare using the methods and procedures specified in 40 CFR Part 63.11(b)(7).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Process (P010)
Activity Description: FCC/CO Boiler (PR 175079) with ESP (PR 195995)

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
fluid catalytic cracker (FCC)/carbon monoxide (CO) boiler with an electrostatic precipitator	OAC rule 3745-17-11(B)(1)	91.2 lbs of particulate emissions (PE)/hr
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-18-08(C)(5)	0.92 lb of sulfur dioxide (SO2)/1,000 lbs of fresh feed
	40 CFR Part 63, Subpart UUU 40 CFR Part 63.1563(b)	See section A.I.2.a.
	40 CFR Part 63.1563(e)	See section A.I.2.b.
	40 CFR Part 63.1564(a)	See section A.I.2.c.
	40 CFR Part 63.1565(a)	See section A.I.2.d.
	40 CFR Part 63.1577	See section A.I.2.e.
	40 CFR Part 63.1569(a)	See sections A.I.2.f and A.I.2.g.

2. Additional Terms and Conditions

2.a The permittee shall comply with the emission limitations and work practice standards for existing emissions units in 40 CFR Part 63, Subpart UUU by no later than April 11, 2005 unless an extension of compliance is granted under 40 CFR Part 63.1563(c).

2.b The permittee must meet the notification requirements in 40 CFR Part 63.1574 [see section A.IV.] according to the schedule in 40 CFR Part 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 Subpart UUU.

2.c METAL HAP EMISSIONS
The permittee must 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.d 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.e Table 44 [see section A.VI.] shows which parts of the General Provisions in 40 CFR Part 63.1 through 63.15 apply to this emissions unit.

2.f 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.g [63.1569(a)(2)]
As provided in 40 CFR Part 63.6(g), the EPA, may choose to grant the permittee permission to use an alternative to the work practice standard in 40 CFR Part 63.1569(a)(1) [see section A.I.2.].

II Operational Restrictions

1. The permittee shall operate the electrostatic precipitator whenever the fluid catalytic cracker unit is in operation, except during periods of startup and shutdown that are exempted pursuant to OAC rule 3745-17-07(A)(3)(a)(i) and 3745-17- 07(A)(3)(b)(i), or during malfunctions that are exempted pursuant to OAC rule 3745-17-07(A)(3)(c).

2. The average daily, total combined power input (in kilowatts) to all fields of the ESP shall be no less than 90 percent of the average daily, total combined power input to such fields that was reported during the day of the most recent emissions test which showed that the emissions unit was in compliance with the particulate emission limitation.

3. The permittee shall burn only refinery fuel gas or natural gas in the CO boiler.

4. The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward.

[63.1564(a)(2)] OPERATING LIMITS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS - 40 CFR Part 63, Subpart UUU

The permittee must comply with each operating limit in Table 2 [see section A.VI.] that applies to this emissions unit.

5. [63.1565(a)(2)] OPERATING LIMITS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC CRACKING UNITS (CCU) - 40 CFR Part 63, Subpart UUU
The permittee must comply with each site-specific operating limit in Table 9 [see section A.VI.] that applies to this emissions unit.

III Monitoring and/or Recordkeeping

1. The permittee shall operate and maintain an instrument to continuously monitor and record the opacity of the particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

2. 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 Director (the appropriate Ohio EPA District Office or local air agency) upon request.

3. 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.

4. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous opacity monitoring system designed to ensure continuous valid and representative readings of opacity. The plan shall include, as a minimum, conducting and recording daily automatic zero/span checks, provisions for conducting a quarterly audit of the continuous opacity monitoring system, and a description of preventive maintenance activities. The plan shall describe step by step procedures for ensuring that sections 7.1.4, 7.4.1, 7.4.2, and Table 1-1 of Performance Specification 1 are maintained on a continuous basis. The quality assurance/quality control plan and a logbook dedicated to the continuous opacity monitoring system must be kept on site and available for inspection during regular office hours.

5. The permittee shall operate and maintain an instrument to continuously monitor and record SO2 from this emissions unit 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.

6. A statement of certification of the existing continuous SO2 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 2. Proof of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

7. The permittee shall maintain records of all data obtained by the continuous SO2 monitoring system including, but not limited to, parts per million SO2 on an instantaneous (1-minute) basis, emissions of SO2 in units of the applicable standard in the appropriate averaging period (lbs per 1,000 lbs of fresh feed), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

8. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous SO2 monitoring system designed to ensure continuous valid and representative readings of SO2. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous SO2 monitoring system must be kept on site and available for inspection during regular office hours.

9. 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.

10. The following requirements of 40 CFR Part 63 Subpart UUU, apply from April 11, 2005 and onward.

    [63.1564] REQUIREMENTS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS - 40 CFR Part 63, Subpart UUU

    a. [63.1564(a)]

        i. [63.1564(a)(3)]
        The permittee must prepare an operation, maintenance, and monitoring plan according to the requirements in 40 CFR Part 63.1574(f) [see section A.IV.] and operate at all times according to the procedures in the plan.

        ii. [63.1564(a)(4)]
        The emission limitations and operating limits for metal HAP emissions from catalytic cracking units required in 40 CFR Part 63.1564(a)(1) and (2) [see sections A.I.2. and A.II.] of this section do not apply during periods of planned maintenance preapproved by the applicable permitting authority according to the requirements in 40 CFR Part 63.1575(j).

11. [63.1565(a)(3) and (4)] WORK PRACTICE STANDARDS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC CRACKING UNITS (CCU) - 40 CFR Part 63, Subpart UUU

a. [63.1565(a)(3)]
The permittee must prepare an operation, maintenance, and monitoring plan according to the requirements in 40 CFR Part 63.1574(f) [see section A.IV.] and operate at all times according to the procedures in the plan.

b. [63.1565(a)(4)]
The emission limitations and operating limits for organic HAP emissions from catalytic cracking units required in 40 CFR Part 63.1565(a)(1) and (2) [see section A.I.2.] do not apply during periods of planned maintenance preapproved by the applicable permitting authority according to the requirements in 40 CFR Part 63.1575(j) [see section A.IV.].

12. [63.1569(a)(3)] WORK PRACTICE STANDARDS FOR HAP EMISSIONS FOR BYPASS LINES - 40 CFR Part 63, Subpart UUU

The permittee must prepare an operation, maintenance, and monitoring plan according to the requirements in 40 CFR Part 63.1574(f) [see section A.IV.] and operate at all times according to the procedures in the plan.

13. [63.1570] GENERAL COMPLIANCE REQUIREMENTS - 40 CFR Part 63, Subpart UUU

a. [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 Part 63.6(f)(1).

b. [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 Part 63.6(h)(1).

c. [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 Part 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.

d. [63.1570(d)]
The permittee must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in 40 CFR Part 63.6(e)(3).

e. [63.1570(e)]
During periods of startup, shutdown, and malfunction, the permittee must operate in accordance with the SSMP.

f. [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 Part 63.1575 [see section A.IV.].

g. [63.1570(g)]
Consistent with 40 CFR Part 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 Part 63.6(e) and the contents of the SSMP.

14. [63.1572] MONITORING, INSTALLATION, OPERATION, AND MAINTENANCE REQUIREMENTS [Tables 40 and 41] - 40 CFR Part 63, Subpart UUU

a. [63.1572(a)]
The permittee must install, operate, and maintain each continuous emission monitoring system according to the requirements in 40 CFR Part 63.1572(a)(1) through (4) [paragraphs a.i. through a.iv. of this section].

i. [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.].

ii. [63.1572(a)(2)]
If the permittee uses a continuous emission monitoring system to meet the NSPS CO or SO2 limit, the permittee must conduct a performance evaluation of each continuous emission monitoring system according to the requirements in 40 CFR Part 63.8. This requirement does not apply to an affected emissions unit subject to the NSPS that has already demonstrated initial compliance with the applicable performance specification.

iii. [63.1572(a)(3)]
As specified in 40 CFR Part 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.

iv. [63.1572(a)(4)]
Data must be reduced as specified in 40 CFR Part 63.8(g)(2).

b. [63.1572(b)]
The permittee must install, operate, and maintain each continuous opacity monitoring system according to the requirements in 40 CFR Part 63.1572(b)(1) through (3) [paragraphs b.i. through b.iii. of this section].

i. [63.1572(b)(1)]
Each continuous opacity monitoring system must be installed, operated, and maintained according to the requirements in Table 40 [see section A.VI.].

ii. [63.1572(b)(2)]
If the permittee uses a continuous opacity monitoring system to meet the NSPS opacity limit, the permittee must conduct a performance evaluation of each continuous opacity monitoring system according to the requirements in 40 CFR Part 63.8 and Table 40 [see section A.VI.]. This requirement does not apply to an affected emissions unit subject to the NSPS that has already demonstrated initial compliance with the applicable performance specification.

iii. [63.1572(b)(3)]
As specified in 40 CFR Part 63.8(c)(4)(i), each continuous opacity monitoring system must 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.

c. [63.1572(c)]
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.

d. [63.1572(d)]
The permittee must monitor and collect data according to the requirements in 40 CFR Part 63.1572(d)(1) and (d)(2) [see paragraph d.i. and d.ii. of this section].

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 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.

15. [63.1573] MONITORING ALTERNATIVES - 40 CFR Part 63, Subpart UUU

a. [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 must use the same procedure for the performance test and for monitoring after the performance test.

i. [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.

ii. [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).

iii. [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)

Qgas = (1.12 scfm/dscfm) x (Qair + Qoxy) x (Tempgas / 273 degrees K) x (Pvent / 1 atm.)

where:

Qgas = 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);
Qair = Volumetric flow rate of air to regenerator, as determined from the catalytic cracking unit control room instrumentations, dscfm;
Qoxy = Volumetric flow rate of oxygen-enriched air stream to regenerator, as determined from the catalytic cracking unit control room instrumentations, dscfm;
Tempgas = 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
Pvent = 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 Pvent = 1 atm.

b. [63.1573(b)] APPROVED ALTERNATIVE FOR MONITORING pH LEVELS
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.].

c. [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 Part 63.1576(c)(1) through (5) [paragraphs c.i. through c.v. of this section}:

i. [63.1573(c)(1)]
The system measures the operating parameter value at least once every hour;

ii. [63.1573(c)(2)]
The system records at least 24 values each day during periods of operation;

iii. [63.1573(c)(3)]
The system records the date and time when monitors are turned off or on;

iv. [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

v. [63.1573(c)(5)]
The system computes daily average values of the monitored operating parameter based on recorded data.

d. [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:

i. [63.1573(d)(1)]
The permittee uses a control device other than a thermal incinerator, boiler, process heater, flare, electrostatic precipitator, or wet scrubber;

ii. [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

iii. [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).

e. [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) [paragraphs e.i. through e.v. of this section].

i. [63.1573(e)(1)]
A description of each affected emissions unit and the parameter(s) to be monitored to determine whether the affected emissions unit will continuously comply with the emission limitations and an explanation of the criteria used to select the parameter(s).

ii. [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 emissions unit 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.

iii. [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.

iv. [63.1573(e)(4)]
Supporting calculations.

v. [63.1573(e)(5)]
Averaging time for the alternative operating parameter.

16. [63.1576] RECORD KEEPING REQUIREMENTS - 40 CFR Part 63, Subpart UUU

a. [63.1576(a)]
The permittee must keep the records specified in 63.1576(a)(1) through (3) [paragraphs a.i through a.iii. of this section].

i. [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 Part 63.10(b)(2)(xiv).

ii. [63.1576(a)(2)]
The records in 40 CFR Part 63.6(e)(1)(iii) through (v) related to startup, shutdown, and malfunction.

iii. [63.1576(a)(3)]
Records of performance tests, performance evaluations, and visible emission observations as required in 40 CFR Part 63.10(b)(2)(viii).

b. [63.1576(b)]
For each continuous emission monitoring system and continuous opacity monitoring system, the permittee must keep the records required in 63.1576(b)(1) through (5) [paragraphs b.i. through b.v. of this section].

i. [63.1576(b)(1)]
Records described in 40 CFR Part 63.10(b)(2)(vi) through (xi) of Subpart A.

ii. [63.1576(b)(2)]
Monitoring data for continuous opacity monitoring systems during a performance evaluation as required in 40 CFR Part 63.6(h)(7)(i) and (ii) of Subpart A.

iii. [63.1576(b)(3)]
Previous (i.e., superceded) versions of the performance evaluation plan as required in 40 CFR Part 63.8(d)(3) of Subpart A.

iv. [63.1576(b)(4)]
Requests for alternatives to the relative accuracy test for continuous emission monitoring systems as required in 40 CFR Part 63.8(f)(6)(i) of Subpart A.

v. [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.

c. [63.1576(c)]
The permittee must keep the records in 40 CFR Part 63.6(h) for visible emission observations.

d. [63.1576(d)]
The permittee must 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.

e. [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.

f. [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.

g. [63.1576(g)]
The records must be in a form suitable and readily available for expeditious review according to 40 CFR Part 63.10(b)(1).

h. [63.1576(h)]
As specified in 40 CFR Part 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.

i. [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 Part 63.10(b)(1). The permittee can keep the records offsite for the remaining 3 years.

17. The permittee shall monitor and record the following on an hourly basis during any operation of each ESP:

a. The secondary voltage, in kilovolts (kV), and the secondary current in amps, for each transformer rectifier (TR) set in the ESP.

b. The power input (in kilowatts) of each TR set for each hour shall be calculated by multiplying it's secondary voltage (in kilovolts) by it's secondary current (in amps), and shall be recorded.

c. The total power input to the ESP for each hour shall be computed and recorded.

d. The average daily, total combined power input to the ESP shall be computed and recorded for each day by adding the hourly total power input to the ESP for the day and, dividing by the number of hours of operation for the day shall be recorded.

The permittee shall maintain daily records that list the ESP sections that are out of service that day.

IV Reporting Requirements

1. Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency 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). These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year.

2. The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency 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. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year

3. If there are no excess opacity 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.

4. Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of SO2 values in excess of the applicable limit of 0.92 lbs per 1,000 lbs of fresh feed, as specified in OAC Chapter 3745-18.

5. The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any continuous SO2 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 also be included in the quarterly report.

6. If there are no excess SO2 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.

7. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas or natural gas is burned in the CO boiler. Each report shall be submitted within 30 days after the deviation occurs.

8. The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward except as stated in 40 CFR Part 63.1574 which may have reports due before April 11, 2005.

   [63.1574] NOTIFICATION SUBMITTAL - 40 CFR Part 63, Subpart UUU

   a. [63.1574(a)]
      Except as allowed in 40 CFR Part 63.1574(a)(1) through (a)(3) [paragraphs a.i. through a.iii. of this section], the permittee must submit all of the notifications in 40 CFR Part 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.

i. [63.1574(a)(1)]
The permittee must submit the notification of the intention to construct or reconstruct according to 40 CFR Part 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 Part 63.5(d)(1)(i) and 63.5(f)(2).

ii. [63.1574(a)(2)]
The permittee must submit the notification of intent to conduct a performance test required in 40 CFR Part 63.7(b) at least 30 calendar days before the performance test is scheduled to begin (instead of 60 days).

iii. [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 Part 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.

(a) [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.

b. [63.1574(c)]
As specified in 40 CFR Part 63.9(b)(3), if the permittee starts the new or reconstructed affected emissions unit on or after April 11, 2002, the permittee must submit the initial notification no later than 120 days after April 11, 2005.

c. [63.1574(d)]
The permittee also must include the information in Table 42 [see section A.VI.] in the notification of compliance status.

d. [63.1574(e)]
If the permittee requested an extension of compliance for an existing catalytic cracking unit as allowed in 40 CFR Part 63.1563(c), the permittee must submit a notification to the appropriate Ohio EPA district office or local air agency containing the required information by October 13, 2003.

e. [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 emissions unit, 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 appropriate Ohio EPA district office or local air agency 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 appropriate Ohio EPA district office or local air agency 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 40 CFR Part 63.1574(f)(2)(i) through (x) [paragraphs e.ii.(a) through e.ii.(j) of this section].

(a) [63.1574(f)(2)(i)]
Process and control device parameters to be monitored for each affected emissions unit, 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 emissions unit.

(c) [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.

(d) [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.

(e) [63.1574(f)(2)(v)]
Procedures used to determine the pH of the water (or scrubbing liquid) exiting a wet scrubber if pH strips are used.

(f) [63.1574(f)(2)(vi)]
Procedures used 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 a colormetric tube sampling system is used, including procedures for correcting for pressure (if applicable to the sampling equipment).

(g) [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.

(h) [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).

(i) [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 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.

(j) [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.

9. [63.1575] REPORTS FOR 40 CFR Part 63, Subpart UUU

a. [63.1575(a)]
The permittee must submit each report in Table 43 [see section A.VI.] that applies to this emissions unit.

b. [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 Part 63.1575(b)(1) through (b)(5) [see paragraphs b.i. through b.v. of this section].

i. [63.1575(b)(1)]
The first compliance report must cover the period beginning April 11, 2005 and ending on June 30, 2005.

ii. [63.1575(b)(2)]
The first compliance report must be postmarked or delivered no later than July 31, 2005.

iii. [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.

iv. [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.

v. [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 paragraphs b.i. through b.iv. of this section].

c. [63.1575(c)]
The compliance report must contain the following information:

i. [63.1575(c)(1)]
Company name and address.

ii. [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.

iii. [63.1575(c)(3)]
Date of report and beginning and ending dates of the reporting period.

iv. [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.

d. [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) [paragraphs c.i. through c.iii. of this section] and the information in 63.1575(d)(1) through (d)(3) [paragraphs d.i. through d.iii. of this section].

i. [63.1575(d)(1)]
The total operating time of each affected emissions unit during the reporting period.

ii. [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.

iii. [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).

e. [63.1575(e)]
For each deviation from an emission limitation occurring at an affected emissions unit where a continuous opacity monitoring system or a continuous emission monitoring system is used to comply with the emission limitation, the permittee must include the information in 40 CFR Part 63.1575(d)(1) through(3) [paragraphs d.i. through d.iii. of this section] and the information in 63.1575(e)(1) through (13) [paragraphs e.i through e.xiii. of this section].

i. [63.1575(e)(1)]
The date and time that each malfunction started and stopped.

ii. [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.

iii. [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 Part 63.8(c)(8) of Subpart A.

iv. [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.

v. [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.

vi. [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.

vii. [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.

viii. [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.

ix. [63.1575(e)(9)]
An identification of each HAP that was monitored at the affected emissions unit.

x. [63.1575(e)(10)]
A brief description of the process units.

xi. [63.1575(e)(11)]
The monitoring equipment manufacturer(s) and model number(s).

xii. [63.1575(e)(12)]
The date of the latest certification or audit for the continuous opacity monitoring system or continuous emission monitoring system.

xiii. [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.

f. [63.1575(f)]
The permittee also must include the information required in 63.1575(f)(1) through (f)(2) [paragraphs f.i. and f.ii. of this section] in each compliance report, if applicable.

i. [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.

ii. [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.

g. [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.

h. [63.1575(h)]
The reporting requirements in paragraphs 63.1575(h)(1) and (2) [paragraphs h.i. and h.ii. of this section] apply to startups, shutdowns, and malfunctions:

i. [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 Part 63.6(e)(3)(iii) and 63.10(d)(5) do not apply.

ii. [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 Part 63.6(e)(3)(iv) and 63.10(d)(5) do not apply.

10. The permittee shall submit deviation (excursion) reports that identify all periods of time during startup and shutdown of the emissions unit when the ESP was not in operation and the temperature of the boiler exhaust gases exceeded the temperature levels specified in OAC rule 3745-17-07(A)(3)(a)(i) and (b)(i).

11. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the average daily, total combined power input limit to such fields for the ESP was less than 90 percent of that established during the most recent emissions test which showed that the emissions unit was in compliance with the particulate emission limitation.

12. The permittee shall submit deviation (excursion) reports that identify the sections of the ESP that were out of service along with the time period involved.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

91.2 lbs of PE/hr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the emission limitation above based upon the results of the stack tests required in section A.V.2.

1.b Emission Limitation:

20% opacity as a 6-minute average, except as provided by the rule

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible particulate emission limitation above in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and the requirements specified in OAC rule 3745-17-03(B)(1).

1.c Emission Limitation:

0.92 lb of SO2/1,000 lbs of fresh feed

Applicable Compliance Method:

The permittee shall demonstrate compliance with the emission limitation above based upon the results of the stack tests required in section A.V.2.

2. The permittee shall conduct, or have conducted, emissions testing for this emissions unit in accordance with the following requirements:

   a. Particulate emissions: emission testing shall be conducted approximately 2.5 years after permit issuance to demonstrate compliance with the particulate emission limitation of 91.2 lbs of PE/hr. This emission testing for PE may be conducted simultaneously with the initial testing required under 40 CFR 63, Subpart UUU, as long as the compliance status is determined for the emission limitation of 91.2 lbs of PE/hr.

b. SO2 emissions: emission testing shall be conducted approximately 2.5 years after permit issuance and within 6 months prior to permit expiration to demonstrate compliance with the SO2 emission limitation of 0.92 lb of SO2/1,000 lbs of fresh feed.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rates:

i. Methods 1 through 5 of 40 CFR Part 60, Appendix A shall be employed to demonstrate compliance with the PE limitation.

ii. Method 6 of 40 CFR Part 60, Appendix A shall be employed to demonstrate compliance with the SO2 emission limitation.

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 appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. 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).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

3. 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.

[63.1564(b)] DEMONSTRATING INITIAL COMPLIANCE WITH THE METAL HAP EMISSIONS AND WORK PRACTICE STANDARDS FOR CATALYTIC CRACKING UNITS - 40 CFR Part 63, Subpart UUU

a. [63.1564(b)(1)]
The permittee must install, operate, and maintain a continuous monitoring system(s) according to the requirements in 40 CFR Part 63.1572 [see section A.III.] and Table 3 [see section A.VI.].

b. [63.1564(b)(2)]
The permittee must conduct a performance test for each catalytic cracking unit not subject to the NSPS for PM according to the requirements in 40 CFR Part 63.1571 [see section A.V.] and under the conditions specified in Table 4 [see section A.VI.].

c. [63.1564(b)(3)]
The permittee must 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.].

d. [63.1564(b)(4)]
The permittee must use the procedures in 40 CFR Part 63.1564(b)(4)(i) through (iv) [paragraphs d.i. through d.iv. of this section] to determine initial compliance with the emission limitations.

i. [63.1564(b)(4)(i)]
If Option 1 is elected in 40 CFR Part 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) of this section as follows:

(Eq.1)

Rc = K1Qr(%CO SUB 2+%CO) + K2Qa - K3Qr[(%CO/2) + %CO2 + %O2] + K3Qoxy(%Oxy)

where:

Rc = Coke burn-off rate, kg/hr (lb/hr);
Qr = 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 must measure before a carbon monoxide boiler, dscm/min (dscf/min);

Qa = 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);
%CO2 = Carbon dioxide concentration in regenerator exhaust, percent by volume (dry basis);
%CO = Carbon monoxide concentration in regenerator exhaust, percent by volume (dry basis);
%O2 = Oxygen concentration in regenerator exhaust, percent by volume (dry basis);
K1 = Material balance and conversion factor, 0.2982 (kg-min)/(hr-dscm-%) (0.0186 (lb-min)/(hr-dscf-%));
K2 = Material balance and conversion factor, 2.088 (kg-min)/(hr-dscm) (0.1303 (lb-min)/(hr-dscf));
K3 = Material balance and conversion factor, 0.0994 (kg-min)/(hr-dscm-%) (0.0062 (lb-min)/(hr-dscf-%));
Qoxy = 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
%Oxy = Oxygen concentration in oxygen-enriched air stream, percent by volume (dry basis).

(Eq.2)

E = [K x Cs x Qsd] \ Rc

where:

E = Emission rate of PM, kg/1,000 kg (lb/1,000 lb) of coke burn-off;
Cs = Concentration of PM, g/dscm (lb/dscf);
Qsd = 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);
Rc = 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)

Es = 1.0 + A(H / Rc) x K'

where:

Es = Emission rate of PM allowed, kg/1,000 kg (1 lb/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.
Rc = Coke burn-off rate, kg coke/hr (1,000 lb coke/hr) determined using Equation 1 of this section; and
K' = Conversion factor to units to standard, 1.0 (kg 2/g)/(1,000 kg) (103 lb/(1,000 lb)).

ii. [63.1564(b)(4)(ii)]
If Option 2 is elected in 40 CFR Part 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 of this section 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)

Opacity Limit = Opacityst x (1 lb/klb coke burn / PMEmRst)

where:

Opacity limit = Maximum permissible hourly average opacity, percent, or 10 percent, whichever is greater;
Opacityst = Hourly average opacity measured during the emissions unit test runs, percent; and

PMEmRst = PM emission rate measured during the emissions unit test, lb/1,000 lbs coke burn.

iii. [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 of this section and the site-specific Ni operating limit (if the permittee uses a continuous opacity monitoring system) using Equations 6 and 7 of this section as follows:

(Eq. 5)

ENi1 = CNi x Qsd

where:

ENi1 = Mass emission rate of Ni, mg/hr (lb/hr); and
CNi = 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)

Opacity1 = [(13 g Ni/hr) / (NiEmR1st)] x Opacityst

where:

Opacity1 = Opacity value for use in Equation 7 of this section, percent, or 10 percent, whichever is greater; and
NiEmR1st = Average Ni emission rate calculated as the arithmetic average Ni emission rate using Equation 5 of this section for each of the performance test runs, g Ni/hr.

(Eq. 7)

Ni Operating Limit1 = Opacity1 x Qmon,st x (E-Catst)

where:

Ni operating limit1 = Maximum permissible hourly average Ni operating limit, percent-acfm-ppmw, i.e., your site-specific Ni operating limit;
Qmon,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 Part 63.1573 [see section A.III.], acfm; and
E-Catst = Ni concentration on equilibrium catalyst measured during emissions unit test, ppmw.

iv. [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 of this section and the site-specific Ni operating limit (if the permittee use a continuous opacity monitoring system) using Equations 9 and 10 of this section as follows:

(Eq. 8)

ENi2 = (CNi x Qsd) / Rc

where:

ENi2 = Normalized mass emission rate of Ni, mg/kg coke (lb/1,000 lbs coke).

(Eq. 9)

Opacity2 = [(1.0 mg/kg coke) / (NiEmR2st)] x Opacityst

where:

Opacity2 = Opacity value for use in Equation 10 of this section, percent, or 10 percent, whichever is greater; and
NiEmR2st = Average Ni emission rate calculated as the arithmetic average Ni emission rate using Equation 8 of this section for each of the performance test runs, mg/kg coke.

(Eq. 10)

Ni Operating Limit2 = Opacity2 x E-Catst x (Qmon,st / Rc,st)

where:

Ni operating limit2 = Maximum permissible hourly average Ni operating limit, percent-ppmw-acfm-hr/kg coke, i.e., the site-specific Ni operating limit; and
Rc,st = Coke burn rate from Equation 1 of this section, as measured during the initial performance test, kg coke/hr.

e. [63.1564(b)(5)]
The permittee must demonstrate initial compliance with each emission limitation that applies to this emissions unit according to Table 5 [see section A.VI.].

f. [63.1564(b)(6)]
The permittee must 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 TDOES as part of your Notification of Compliance Status.

g. [63.1564(b)(7)]
The permittee must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 40 CFR Part 63.1574 [see section A.IV.].

4. [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

a. [63.1564(c)(1)]
The permittee must 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.].

b. [63.1564(c)(2)]
The permittee must demonstrate continuous compliance with the work practice standard in 40 CFR Part 63.1564(a)(3) [see section A.III.] by maintaining records to document conformance with the procedures in the operation, maintenance, and monitoring plan.

c. [63.1564(c)(3)]
If the permittee uses a continuous opacity monitoring system and elects to comply with Option 3 in 40 CFR Part 63.1564(a)(1)(iii) [see section A.I.2.], the permittee must determine continuous compliance with the site-specific Ni operating limit by using Equation 11 of this section as follows:

(Eq. 11)

Ni Operating Value1 = Opacity x Qmon x E-Cat

where:

Ni operating value1 = Maximum permissible hourly average Ni standard operating value,%-acfm-ppmw;
Opacity = Hourly average opacity, percent;
Qmon = Hourly average actual gas flow rate as measured by continuous parameter monitoring system or calculated by alternative procedure in 40 CFR Part 63.1573 [see section A.III.], acfm; and

E-Cat = Ni concentration on equilibrium catalyst from weekly or more recent measurement, ppmw.

d. [63.1564(c)(4)]
If the permittee uses a continuous opacity monitoring system and elects to comply with Option 4 in 40 CFR Part 63.1564(a)(1)(iv) [see section A.I.2.], the permittee must determine continuous compliance with the site-specific Ni operating limit by using Equation 12 of this section as follows:

(Eq. 12)

Ni Operating Value2 = (Opacity x E-Cat x Qmon) / Rc

where:

Ni operating value2 = Maximum permissible hourly average Ni standard operating value, percent-acfm-ppmw-hr/kg coke.

5. [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

a. [63.1565(b)(1)]
The permittee must install, operate, and maintain a continuous monitoring system according to the requirements in 40 CFR Part 63.1572 [see section A.III.] and Table 10 [see section A.VI.]. Except:

i. [63.1565)(b)(1)(i)]
Whether or not the catalytic cracking unit is subject to the NSPS for CO in 40 CFR Part 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 must 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 must continuously monitor CO emissions for 30 days using a CO continuous emission monitoring system that meets the requirements in 40 CFR Part 63.1572 [see section A.III.].

ii. [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).

iii. [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.

b. [63.1565(b)(2)]
The permittee must conduct each performance test for a catalytic cracking unit not subject to the NSPS for CO according to the requirements in 40 CFR Part 63.1571 [see section A.V.] and under the conditions specified in Table 11 [see section A.VI.] of this subpart.

c. [63.1565(b)(3)]
The permittee must 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.].

d. [63.1565(b)(4)]
The permittee must demonstrate initial compliance with each emission limitation that applies to this emissions unit according to Table 12 [see section A.VI.].

e. [63.1565(b)(5)]
The permittee must demonstrate initial compliance with the work practice standard in 40 CFR Part 63.1656(a)(3) [see section A.I.2.] by submitting the operation, maintenance, and monitoring plan to the TDOES as part of the Notification of Compliance Status according to 40 CFR Part 63.1574 [see section A.IV.].

f. [63.1565(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 Part 63.1574 [see section A.IV.].

6. [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

a. [63.1565(c)(1)]
The permittee must 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.].

b. [63.1565(c)(2)]
The permittee must demonstrate continuous compliance with the work practice standard in 40 CFR Part 63.1565(a)(3) [see section A.III.]by complying with the procedures in the operation, maintenance, and monitoring plan.

7. [63.1569(b)] DEMONSTRATING INITIAL COMPLIANCE WITH THE WORK PRACTICE STANDARDS FOR BYPASS LINES - 40 CFR Part 63, Subpart UUU

a. [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 Part 63.1571 [see section A.V.] and under the conditions specified in Table 37 [see section A.VI.].

b. [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.].

c. [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 TDOES as part of the notification of compliance status.

d. [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 Part 63.1574 [see section A.IV.].

8. [63.1569(c)] DEMONSTRATING CONTINUOUS COMPLIANCE WITH THE WORK PRACTICE STANDARDS FOR BYPASS LINES - 40 CFR Part 63, Subpart UUU

a. [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.].

b. [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.

9. [63.1571] PERFORMANCE TEST AND OTHER INITIAL COMPLIANCE DEMONSTRATION - 40 CFR Part 63, Subpart UUU

a. [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 Part 63.6(a)(2) of Subpart A.

i. [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.

ii. [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.

b. [63.1571(b)] GENERAL REQUIREMENTS FOR PERFORMANCE TESTS AND PERFORMANCE EVALUATIONS

The permittee must:

i. [63.1571(b)(1)]
Conduct each performance test according to the requirements in 40 CFR Part 63.7(e)(1).

ii. [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 Part 63.7(e)(3). Each test run must last at least 1 hour.

iii. [63.1571(b)(3)]
Conduct each performance evaluation according to the requirements in 40 CFR Part 63.8(e).

iv. [63.1571(b)(4)]
Not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in 40 CFR Part 63.7(e)(1).

v. [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 Part 63.1564 [see section A.V.], and determining the arithmetic average of the calculated emission rates.

c. [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 appropriate Ohio EPA District Office or local air agency. An engineering assessment may include the approaches listed in 40 CFR Part 63.1571(c)(1) through (c)(4) [paragraphs c.i. through c.iv. of this section]. Other

engineering assessments may be used but are subject to review and approval by the appropriate Ohio EPA District Office or local air agency.

i. [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;

ii. [63.1571(c)(2)]
The permittee may use bench-scale or pilot-scale test data representative of the process under representative operating conditions;

iii. [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

iv. [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:

(a) [63.1571(c)(4)(i)]
Use of material balances based on process stoichiometry to estimate maximum TOC concentrations;

(b) [63.1571(c)(4)(ii)]
Calculation of hourly average maximum flow rate based on physical equipment design such as pump or blower capacities; and

(c) [63.1571(c)(4)(iii)]
Calculation of TOC concentrations based on saturation conditions.

d. [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. The permittee may adjust the values measured during the performance test according to the criteria in 40 CFR Part 63.1571(d)(1) through (d)(3) [paragraphs d.i. through d.iii. of this section].

i. [63.1571(d)(1)]
If the permittee elects the option in 40 CFR Part 63.1564(a)(1)(iii) [see section A.I.2.] (Ni lb/hr), and uses continuous parameter monitoring systems, the permittee must 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 Part 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 must make this adjustment using Equation 1 of this section as follows:

(Eq. 1)

Ecat-Limit = [(13 g Ni/hr) / (NiEmR1st)] x Ecatst

where:

Ecat-Limit = Operating limit for equilibrium catalyst Ni concentration, mg/kg;
NiEmR1st = Average Ni emission rate calculated as the arithmetic average Ni emission rate using Equation 5 of this section for each performance test run, g Ni/hr; and
Ecatst = Average equilibrium Ni concentration from laboratory test results, mg/kg.

ii. [63.1571(d)(2)]
If the permittee elects the option in 40 CFR Part 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 must 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 must make this adjustment using Equation 2 of this section as follows:

(Eq. 2)

Ecat-Limit = [(1.0 mg/kg coke burn-off) / (NiEmR2st)] x Ecatst

where:

NiEmR2st = Average Ni emission rate calculated as the arithmetic average Ni emission rate using Equation 8 of 40 CFR Part 63.1564 [see section A.V.] for each performance test run, mg/kg coke burn-off.

iii. [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).

iv. [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 appropriate Ohio EPA District Office or local air agency, that the affected emissions unit complies with the applicable emission limit at the operating limit based on adjusted values.

e. [63.1571(e)]
The permittee may change the established operating limit by meeting the requirements in 40 CFR Part 63.1571(e)(1) through (3) [paragraphs e.i. through e.iii. of this section].

i. [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.

ii. [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 40 CFR Part 63.1571(e)(1) [paragraph e.i. of this section].

iii. [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. For all references to the tables in 40 CFR Part 63, Subpart UUU, see the attached document entitled "Attachment #1 (FCC)".

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Process (P011)
Activity Description: SRU Foul Condensate Stripper (PR 164263)

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
sulfur recovery unit, foul condensate stripper	OAC rule 3745-18-08(C)(3)	100 lbs of sulfur dioxide (SO2) per 1,000 lbs of sulfur processed at the Claus unit (See section A.I.2.a.)
	40 CFR Part 63, Subpart CC	See section A.I.2.b
	40 CFR Part 63, Subpart UUU 40 CFR Part 63.1563(b)	See section A.I.2.c.
	40 CFR Part 63.1563(e)	See section A.I.2.d.
	40 CFR Part 63.1568(a)	See section A.I.2.e.
	40 CFR Part 63.1577	See section A.I.2.f.
	40 CFR Part 63.1569(a)	See sections A.I.2.g. and A.I.2.h.

2. Additional Terms and Conditions

2.a The emission limitation of 100 lbs of SO2 per 1,000 lbs of sulfur processed at the Claus unit is for emissions units P002, P011, and P015, combined. For a specific period of time, the amount of sulfur processed is equal to the amount of sulfur entering the Claus unit plus the amount of any sulfur bypassed to the flare(s) from the amine unit and/or the

sour water stripper. The bypassing of any significant hydrogen sulfide gases from the amine unit and/or the sour water stripper to the flare(s) is a violation of the allowable SO_2 emission rate.

2.b The permittee shall comply with the emission limitations and work practice standards for existing emissions units in 40 CFR Part 63, Subpart UUU by no later than April 11, 2005 unless an extension of compliance is granted under 40 CFR Part 63.1563(c).

2.c The permittee must meet the notification requirements in 40 CFR Part 63.1574 [see section A.IV.] according to the schedule in 40 CFR Part 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 Subpart UUU.

2.d The permittee must meet each emission limitation in Table 29 of this subpart that applies to this emissions unit. If the sulfur recovery unit isn't subject to the NSPS for sulfur oxides, the permitte can choose from the options in 63.1568(a)(1)(i) through (ii) of this section:

i. [63.1568(a)(1)(i)]
The permittee can elect to meet the NSPS requirements (Option 1); or

ii. [63.1568(a)(1)(i)]
The permittee can elect to meet the total reduced sulfur (TRS) emission limitation (Option 2).

2.e Table 44 of [see section A.VI.] shows which parts of the General Provision in 40 CFR Part 63.1 through 63.15 apply to this emissions unit.

2.f [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.g [63.1569(a)(2)]
As provided in 40 CFR Part 63.6(g), the US 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. The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward.

   [63.1568(a)] REQUIREMENTS FOR HAP EMISSIONS FROM SULFUR RECOVERY UNITS

   a. [63.1568(a)(2)]
   The permittee must meet each operating limit in Table 30 [see section A.VI.] that applies to this emissions unit.

   b. [63.1568(a)(3)]
   The permittee must prepare an operation, maintenance, and monitoring plan according to the requirements in 40 CFR Part 63.1574(f) [see section A.IV.] and operate at all times according to the procedures in the plan.

2. [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 Part 63.1574(f) [see section A.IV.] and operate at all times according to the procedures in the plan.

III Monitoring and/or Recordkeeping

1. The permittee shall maintain daily records of the following information, while the emissions unit is in operation:

   a. the total amount of sulfur processed (see A.I.2.a);

   b. the total SO_2 emissions, in pounds, from the Claus unit and the flare(s); and

   c. the average SO_2 emission rate, in pound of SO_2 per pound of sulfur processed.

2. In order to demonstrate compliance with the emission limitations of 100 lbs of SO2/1,000 lbs of sulfur processed at the Claus unit, the permittee shall operate and maintain an instrument for continuously monitoring and recording the SO2 emission rate in terms of the applicable

standards for emissions units P002, P011 and P015, combined. The monitoring shall be conducted in accordance with 40 CFR 60.13, as follows:

a. The span value for this instrument is 125 percent of the applicable SO2 emission limitation.

b. The performance evaluations for this SO2 monitor under 40 CFR 60.13 shall use Performance Specification 2 of 40 CFR Part 60, Appendix B.

The permittee shall conduct an annual relative accuracy test audit (RATA) for the SO2 continuous emission monitoring equipment. Method 6 of 40 CFR Part 60, Appendix A, or other approved U.S. EPA methods shall be used for conducting the annual RATAs.

3. A statement of certification of the existing SO2 continuous emission monitoring system (CEMS) 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 2. Proof of certification shall be made available to representatives of the appropriate Ohio EPA District Office or local air agency upon request.

4. The permittee shall maintain records of all data obtained by the continuous SO2 CEMS including, but not limited to, parts per million SO2 on an instantaneous (1-minute) basis, emissions of SO2 in units of the applicable standard (lb/1,000 lbs of sulfur processed) as a rolling, 30-day average, the results of daily zero/span calibration checks, and the magnitudes of manual calibration adjustments.

5. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the SO2 CEMS designed to ensure continuous valid and representative readings of SO2. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous SO2 monitoring system must be kept on site and available for inspection during regular office hours.

6. The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward.

[63.1570] GENERAL COMPLIANCE REQUIREMENTS - 40 CFR Part 63, Subpart UUU

a. [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 Part 63.6(f)(1).

b. [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 Part 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.

c. [63.1570(d)]
The permittee must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in 40 CFR Part 63.6(e)(3).

d. [63.1570(e)]
During periods of startup, shutdown, and malfunction, the permittee must operate in accordance with the SSMP.

e. [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 Part 63.1575 [see section A.IV.].

f. [63.1570(g)]
Consistent with 40 CFR Part 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 Part 63.6(e) and the contents of the SSMP.

7. [63.1572] MONITORING, INSTALLATION, OPERATION, AND MAINTENANCE REQUIREMENTS [Tables 40 and 41] - 40 CFR Part 63, Subpart UUU

a. [63.1572(a)]
The permittee must install, operate, and maintain each continuous emission monitoring system according to the requirements in 40 CFR Part 63.1572(a)(1) through (4) [paragraphs a.i. through a.iv. of this section].

i. [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.].

ii. [63.1572(a)(2)]
If the permittee uses a continuous emission monitoring system to meet the NSPS CO or SO2 limit, the permittee must conduct a performance evaluation of each continuous emission monitoring system according to the requirements in 40 CFR Part 63.8. This requirement does not apply to an affected emissions unit subject to the NSPS that has already demonstrated initial compliance with the applicable performance specification.

iii. [63.1572(a)(3)]
As specified in 40 CFR Part 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.

iv. [63.1572(a)(4)]
Data must be reduced as specified in 40 CFR Part 63.8(g)(2).

b. [63.1572(d)]
The permittee must monitor and collect data according to the requirements in 40 CFR Part 63.1572(d)(1) and (d)(2) [see paragraph b.i. and b.ii. of this section].

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 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.

8. [63.1576] RECORD KEEPING REQUIREMENTS - 40 CFR Part 63, Subpart UUU

a. [63.1576(a)]
The permittee must keep the records specified in 63.1576(a)(1) through (3) [paragraphs a.i through a.iii. of this section].

i. [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 Part 63.10(b)(2)(xiv).

ii. [63.1576(a)(2)]
The records in 40 CFR Part 63.6(e)(1)(iii) through (v) related to startup, shutdown, and malfunction.

iii. [63.1576(a)(3)]
Records of performance tests, performance evaluations, and visible emission observations as required in 40 CFR Part 63.10(b)(2)(viii).

b. [63.1576(b)]
For each continuous emission monitoring system and continuous opacity monitoring system, the permittee must keep the records required in 63.1576(b)(1) through (5) [paragraphs b.i. through b.v. of this section].

i. [63.1576(b)(1)]
Records described in 40 CFR Part 63.10(b)(2)(vi) through (xi) of Subpart A.

ii. [63.1576(b)(2)]
Monitoring data for continuous opacity monitoring systems during a performance evaluation as required in 40 CFR Part 63.6(h)(7)(i) and (ii) of Subpart A.

iii. [63.1576(b)(3)]
Previous (i.e., superceded) versions of the performance evaluation plan as required in 40 CFR Part 63.8(d)(3) of Subpart A.

iv. [63.1576(b)(4)]
Requests for alternatives to the relative accuracy test for continuous emission monitoring systems as required in 40 CFR Part 63.8(f)(6)(i) of Subpart A.

v. [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.

c. [63.1576(c)]
The permittee must keep the records in 40 CFR Part 63.6(h) for visible emission observations.

d. [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.

e. [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.

f. [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.

g. [63.1576(g)]
The records must be in a form suitable and readily available for expeditious review according to 40 CFR Part 63.10(b)(1).

h. [63.1576(h)]
As specified in 40 CFR Part 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.

i. [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 Part 63.10(b)(1). The permittee can keep the records offsite for the remaining 3 years.

IV Reporting Requirements

1. The permittee shall submit quarterly excess emission and data assessment reports to the appropriate Ohio EPA District Office or local air agency by January 30, April 30, July 30 and October 30 of each year detailing the data obtained from the CEMS of the SRU during the previous quarter. The report shall include the percent availability of the SRU, the dates, duration, amounts (tons), and points of emission of excess sulfur dioxide emissions that are caused by malfunctions or shutdowns of the amine unit, sour water stripper, or the SRU, and an analysis of

the cause of and corrective action taken for each malfunction (including any bypassing of the amine-claus SRU to the refinery flare system) or shutdown. The report shall also include all instances of daily SO2 values in excess of the limitation specified in OAC rule 3745-18-08(C)(3).

2. The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any SO2 CEMS 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 source 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 the quarterly report.

3. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) on a quarterly basis, in writing, of all rolling, 30-day periods during which the average SO2 emissions as measured by the SO2 CEMS under 40 CFR 60.13 exceeds 100 lbs of SO2 per 1,000 lbs of sulfur processed at the Claus unit. The rolling, 30-day average shall be determined as the arithmetic average of 30 contiguous 24-hour averages. The notification shall include a copy of the record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) by January 30, April 30, July 30 and October 30 of each year and shall address the data obtained during the previous calendar quarters. These reports shall also contain the total SO2 emissions for the calendar quarter (in tons).

4. If there are no excess SO2 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.

5. The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward except as stated in 40 CFR Part 63.1574 which may have reports due before April 11, 2005.

   [63.1574] NOTIFICATION SUBMITTAL - 40 CFR Part 63, Subpart UUU

   a. [63.1574(a)]
      Except as allowed in 40 CFR Part 63.1574(a)(1) through (a)(3) [paragraphs a.i. through a.iii. of this section], the permittee must submit all of the notifications in 40 CFR Part 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.

i. [63.1574(a)(1)]
The permittee must submit the notification of the intention to construct or reconstruct according to 40 CFR Part 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 Part 63.5(d)(1)(i) and 63.5(f)(2).

ii. [63.1574(a)(2)]
The permittee must submit the notification of intent to conduct a performance test required in 40 CFR Part 63.7(b) at least 30 calendar days before the performance test is scheduled to begin (instead of 60 days).

iii. [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 Part 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.

(a) [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.

b. [63.1574(c)]
As specified in 40 CFR Part 63.9(b)(3), if the permittee starts the new or reconstructed affected emissions unit on or after April 11, 2002, the permittee must submit the initial notification no later than 120 days after April 11, 2005.

c. [63.1574(d)]
The permittee also must include the information in Table 42 [see section A.VI.] in the notification of compliance status.

d. [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 emissions unit, 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 appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency for review and approval and comply with the plan until the change is approved.

ii. [63.1574(f)(2)]
Each plan must include, at a minimum, the applicable information as specified in 40 CFR Part 63.1574(f)(2)(i) through (x) [paragraphs d.ii.(a) through d.ii.(e) of this section].

(a) [63.1574(f)(2)(i)]
Process and control device parameters to be monitored for each affected emissions unit, 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 emissions unit.

(c) [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).

(d) [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 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.

(e) [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.

6. [63.1575] REPORTS FOR 40 CFR Part 63, Subpart UUU

a. [63.1575(a)]
The permittee must submit each report in Table 43 [see section A.VI.] that applies to this emissions unit.

b. [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 Part 63.1575(b)(1) through (b)(5) [see paragraphs b.i. through b.v. of this section].

i. [63.1575(b)(1)]
The first compliance report must cover the period beginning April 11, 2005 and ending on June 30, 2005.

ii. [63.1575(b)(2)]
The first compliance report must be postmarked or delivered no later than July 31, 2005.

iii. [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.

iv. [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.

v. [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 paragraphs b.i. through b.iv. of this section].

c. [63.1575(c)]
The compliance report must contain the following information:

i. [63.1575(c)(1)]
Company name and address.

ii. [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.

iii. [63.1575(c)(3)]
Date of report and beginning and ending dates of the reporting period.

iv. [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.

d. [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) [paragraphs c.i. through c.iii. of this section] and the information in 63.1575(d)(1) through (d)(3) [paragraphs d.i. through d.iii. of this section].

i. [63.1575(d)(1)]
The total operating time of each affected emissions unit during the reporting period.

ii. [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.

iii. [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).

e. [63.1575(e)]
For each deviation from an emission limitation occurring at an affected emissions unit where a continuous opacity monitoring system or a continuous emission monitoring system is used to comply with the emission limitation, the permittee must include the information in 40 CFR Part 63.1575(d)(1) through(3) [paragraphs d.i. through d.iii. of this section] and the information in 63.1575(e)(1) through (13) [paragraphs e.i through e.xiii. of this section].

i. [63.1575(e)(1)]
The date and time that each malfunction started and stopped.

ii. [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.

iii. [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 Part 63.8(c)(8) of Subpart A.

iv. [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.

v. [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.

vi. [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.

vii. [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.

viii. [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.

ix. [63.1575(e)(9)]
An identification of each HAP that was monitored at the affected emissions unit.

x. [63.1575(e)(10)]
A brief description of the process units.

xi. [63.1575(e)(11)]
The monitoring equipment manufacturer(s) and model number(s).

xii. [63.1575(e)(12)]
The date of the latest certification or audit for the continuous opacity monitoring system or continuous emission monitoring system.

xiii. [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.

f. [63.1575(f)]
The permittee also must include the information required in 63.1575(f)(1) through (f)(2) [paragraphs f.i. and f.ii. of this section] in each compliance report, if applicable.

i. [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.

ii. [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.

g. [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.

h. [63.1575(h)]
The reporting requirements in paragraphs 63.1575(h)(1) and (2) [paragraphs h.i. and h.ii. of this section] apply to startups, shutdowns, and malfunctions:

i. [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 Part 63.6(e)(3)(iii) and 63.10(d)(5) do not apply.

ii. [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 Part 63.6(e)(3)(iv) and 63.10(d)(5) do not apply.

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:

1.a Emission Limitation:

100 lbs of SO2 per 1,000 lbs of sulfur processed at the Claus unit for emissions units P002, P011, and P015, combined

Applicable Compliance Method:

Compliance shall be based upon the results of the continuous emission monitoring as required in section A.III. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with Method 6 of 40 CFR Part 60, Appendix A.

2. 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.

[63.1568] DEMONSTRATING COMPLIANCE WITH THE WORK PRACTICE STANDARDS AND EMISSION LIMITATIONS FROM SULFUR RECOVERY UNITS

a. [63.1568(b)] DEMONSTRATING INITIAL COMPLIANCE
The permittee must:

i. [63.1568(b)(1)]
Install, operate, and maintain a continuous monitoring system according to the requirements in 40 CFR Part 63.1572 [see section A.III.] and Table 31 [see section A.VI.].

ii. [63.1568(b)(2)]
Conduct each performance test for a sulfur recovery unit not subject to the NSPS for sulfur oxides according to the requirements in 40 CFR Part 63.1571 [see section A.V.] and under the conditions specified in Table 32 [see section A.VI.].

iii. [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.].

iv. [63.1568(b)(4)]
Correct the reduced sulfur samples to zero percent excess air using Equation 1 of this section as follows:

(Eq. 1)

$$C_{adj} = C_{meas} [20.9c / (20.9 - \%O_2)]$$

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;

20.9c = 20.9 percent oxygen?0.0 percent oxygen (defined oxygen correction basis), percent;
20.9 = oxygen concentration in air, percent;
%O2 = oxygen concentration measured on a dry basis, percent.

v. [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.].

vi. [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 appropriate Ohio EPA District Office or local air agency as part of the notification of compliance status.

vii. [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 Part 63.1574 [see section A.IV.].

b. [63.1568(c)] DEMONSTRATING CONTINUOUS COMPLIANCE
The permittee must

i. [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.

ii. [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.

3. [63.1569(b)] DEMONSTRATING INITIAL COMPLIANCE WITH THE HAP EMISSION LIMITATIONS FROM BYPASS LINES - 40 CFR Part 63, Subpart UUU

a. [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 Part 63.1571 [see section A.V.] and under the conditions specified in Table 37 [see section A.VI.].

b. [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.].

c. [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 appropriate Ohio EPA District Office or local air agency as part of the notification of compliance status.

d. [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 Part 63.1574 [see section A.IV.].

4. [63.1569(c)] DEMONSTRATING CONTINUOUS COMPLIANCE WITH THE WORK PRACTICE STANDARDS FOR BYPASS LINES - 40 CFR Part 63, Subpart UUU

a. [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.].

b. [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.

5. [63.1571] PERFORMANCE TEST AND OTHER INITIAL COMPLIANCE DEMONSTRATION - 40 CFR Part 63, Subpart UUU

a. [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 Part 63.6(a)(2) of Subpart A.

i. [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.

ii. [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.

b. [63.1571(b)] GENERAL REQUIREMENTS FOR PERFORMANCE TESTS AND PERFORMANCE EVALUATIONS
The permittee must:

i. [63.1571(b)(1)]
Conduct each performance test according to the requirements in 40 CFR Part 63.7(e)(1).

ii. [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 Part 63.7(e)(3). Each test run must last at least 1 hour.

iii. [63.1571(b)(3)]
Conduct each performance evaluation according to the requirements in 40 CFR Part 63.8(e).

iv. [63.1571(b)(4)]
Not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in 40 CFR Part 63.7(e)(1).

c. [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 appropriate Ohio EPA District Office or local air agency. An engineering assessment may include the approaches listed in 40 CFR Part 63.1571(c)(1) through (c)(4) [paragraphs c.i. through c.iv. of this section]. Other engineering assessments may be used but are subject to review and approval by the appropriate Ohio EPA District Office or local air agency.

i. [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;

ii. [63.1571(c)(2)]
The permittee may use bench-scale or pilot-scale test data representative of the process under representative operating conditions;

iii. [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

iv. [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:

(a) [63.1571(c)(4)(i)]
Use of material balances based on process stoichiometry to estimate maximum TOC concentrations;

(b) [63.1571(c)(4)(ii)]
Calculation of hourly average maximum flow rate based on physical equipment design such as pump or blower capacities; and

(c) [63.1571(c)(4)(iii)]
Calculation of TOC concentrations based on saturation conditions.

d. [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 the Notification of Compliance Status, demonstrating to the satisfaction of the appropriate Ohio EPA District Office or local air agency, that the affected

emissions unit complies with the applicable emission limit at the operating limit based on adjusted values.

e. [63.1571(e)]
The permittee may change the established operating limit by meeting the requirements in 63.1571(e)(1) through (2) [paragraphs e.i. through e.ii. of this section].

i. [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.

ii. [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) [paragraph e.i. of this section].

VI Miscellaneous Requirements

1. For all references to the tables in 40 CFR Part 63, Subpart UUU, see the attached document entitled "Attachment #2 (SRU)".

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Process (P012)
Activity Description:
API oil/water separator with covers

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
API oil/water separator with covers	OAC rule 3745-21-09(M)(2)	See section A.I.2.a.

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 no later than the date specified in paragraph (C)(13) of rule 3745-21-04 of the Administrative Code 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 lids and seals which are kept in a closed position at all times except when in actual use.

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Process (P014)
Activity Description: Vacuum II Distillation Tower with Firebox (Crude II) (PR 164058)

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
vacuum II distillation tower with firebox (crude II)(PR 164058)	OAC rule 3745-18-06(E)(2)	1,620 lbs of sulfur dioxide (SO2)/hr (See section A.I.2.a.)
	OAC rule 3745-21-09(M)(1)	See section A.I.2.b.
	40 CFR 63.643	See section A.I.2.c.
	40 CFR 63.644	See sections A.III.1 through A.III.4.
	40 CFR 63.654	See section A.III.6.

2. Additional Terms and Conditions

2.a The allowable SO2 emission limitation is based on the equation in OAC rule 3745-18-06(E)(2) and a maximum process weight rate of 385.25 tons per hour.

2.b The permittee shall control the emissions of volatile organic compounds from any vacuum producing system by piping the vapors to an appropriate firebox or incinerator, or by compressing the vapors and adding them to the refinery fuel gas system.

2.c The permittee has identified the refinery fuel gas fired crude II heater (emissions unit B004) as the primary control device, and the LIU flare (emissions unit P007) as the secondary control device for this emissions unit. Therefore, pursuant to the Group 1

miscellaneous process vent requirements in 40 CFR 63.641, the permittee shall comply with the requirements of either 40 CFR 63.643(a)(1) or 63.643(a)(2), as follows:

i. Reduce emissions of organic HAP's using a flare (emissions unit P007) that meets the requirements of 40 CFR 63.11(b) of subpart A. [40 CFR 63.643(a)(1)]

Terms and conditions for this flare are contained in the terms and conditions for emissions unit P007.

ii. 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. [40 CFR 63.643(a)(2)]

iii. 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), 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) and 40 CFR 63.645. [40 CFR 63.643(b)]

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. The design heat input capacity of the process heater (emissions unit B004) used as the primary control device is greater than 44 megawatts. Therefore, as long as all vent streams routed into emissions unit B004 from the vacuum II distillation tower are introduced into the flame zone of emissions unit B004, no additional monitoring requirements are applicable for this process heater. [40 CFR 63.644(a)(3)]

2. Monitoring requirements for 40 CFR 63.644(a)(2) for the flare used as secondary control are listed in section A.III.1 for emissions unit P007.

3. The permittee shall establish a range that ensures compliance with the emission standard for the flare monitoring parameter listed in 40 CFR 63.644(a)(2). 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. [40 CFR 63.644(d)]

4. Each permittee of a control device subject to the monitoring provisions of 40 CFR 63.644 (i.e., the LIU flare, emissions unit P007) 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)(2). Operation of the control device in a manner that constitutes a period of excess emissions, as defined in 40 CFR 63.654(g)(6), or failure to perform procedures required by this section shall constitute a violation of the applicable emission standard of this subpart. [40 CFR 63.644(e)]

5. Record keeping requirements for the flare used as secondary control are listed in sections A.III.2 and A.III.3 for emissions unit P007.

6. All other information required to be reported under paragraphs (a) through (h) of 40 CFR 63.654 shall be retained for 5 years. [40 CFR 63.654(i)(4)]

IV Reporting Requirements

1. 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 (g)(1) through (g)(6) of 40 CFR 63.654 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 paragraphs (g)(1) through (g)(6) of 40 CFR 63.654 occurred during the 6-month period unless emissions averaging is utilized. Quarterly reports must be submitted for emission points included in emissions averages, as provided in 40 CFR 63.654(g)(8). 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 40 CFR 63.654(g)(1) through (g)(8).

2. For miscellaneous process vents for which continuous parameter monitors are required by 40 CFR 63.644, periods of excess emissions shall be identified in the periodic reports and shall be used to determine compliance with the emission standards. Periods of excess emissions means any of the following conditions:

   a. An operating day when all pilot flames of a flare are absent.

   b. 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.

   c. For data compression systems approved under (h)(5)(iii) of 40 CFR 63.654, 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.

3. For miscellaneous process vents, excess emissions shall be reported for the operating parameters specified in table 10 of 40 CFR 63.654 unless other site-specific parameter(s) have been approved by the operating permit authority.

4. Period of startup and shutdown that meet the definition of 40 CFR 63.641, and malfunctions that meet the definition in 40 CFR 63.2 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.

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:

1.a Emission Limitation:

1,620 lbs of SO2/hr

Applicable Compliance Method:

Compliance shall be based upon the emission testing requirements specified in section A.V.2 of this permit.

2. 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 after permit issuance, approximately 2.5 years after permit issuance, and within 6 months prior to permit expiration.

   b. The emission testing shall be conducted to demonstrate compliance with the SO2 emission limitation of 1,620 lbs of SO2/hr.

   c. The following test method shall be employed to demonstrate compliance with the SO2 emission limitation of 1,620 lbs of SO2/hr:

      i. Method 6 of 40 CFR, Part 60, Appendix A shall be employed to demonstrate compliance with the SO2 emission limitation. 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 appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. 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).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Process (P015)
Activity Description: Sulfur Recovery Unit--DEA Unit--Incinerator stack/Claus Unit (PR 175002), Fuel Gas Absorber (PR 164282), Propylene Contactor (PR 164326), DEA Regenerator (PR 164283)

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
sulfur recovery unit, DEA unit - incinerator stack/Claus unit, fuel gas absorber, propylene contactor, DEA regenerator	OAC rule 3745-18-08(C)(3)	100 lbs of sulfur dioxide (SO2) per 1,000 lbs of sulfur processed at the Claus unit (See section A.I.2.a.)
	40 CFR Part 63, Subpart CC	See section A.I.2.b.
	40 CFR Part 63, Subpart UUU 40 CFR Part 63.1563(b)	See section A.I.2.c.
	40 CFR Part 63.1563(e)	See section A.I.2.d.
	40 CFR Part 63.1568(a)	See section A.I.2.e.
	40 CFR Part 63.1577	See section A.I.2.f.
	40 CFR Part 63.1569(a)	See sections A.I.2.g. and A.I.2.h.

2. **Additional Terms and Conditions**

2.a The emission limitation of 100 lbs of SO2 per 1,000 lbs of sulfur processed at the Claus unit is for emissions units P002, P011, and P015, combined. For a specific period of

time, the amount of sulfur processed is equal to the amount of sulfur entering the Claus unit plus the amount of any sulfur bypassed to the flare(s) from the amine unit and/or the sour water stripper. The bypassing of any significant hydrogen sulfide gases from the amine unit and/or the sour water stripper to the flare(s) is a violation of the allowable SO_2 emission rate.

2.b Pursuant to the Group 1 miscellaneous process vent requirements in 40 CFR 63.641, the permittee shall reduce emissions of organic HAP's using a flare (emissions unit P006) that meets the requirements of 40 CFR 63.11(b) of subpart A. Terms and conditions for this flare are contained in the terms and conditions for emissions unit P006.

2.c The permittee shall comply with the emission limitations and work practice standards for existing emissions units in 40 CFR Part 63, Subpart UUU by no later than April 11, 2005 unless an extension of compliance is granted under 40 CFR Part 63.1563(c).

2.d The permittee must meet the notification requirements in 40 CFR Part 63.1574 [see section A.IV.] according to the schedule in 40 CFR Part 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 Subpart UUU.

2.e The permittee must meet each emission limitation in Table 29 of this subpart that applies to this emissions unit. If the sulfur recovery unit isn't subject to the NSPS for sulfur oxides, the permittee can choose from the options in 63.1568(a)(1)(i) through (ii) of this section:

i. [63.1568(a)(1)(i)]
The permittee can elect to meet the NSPS requirements (Option 1); or

ii. [63.1568(a)(1)(i)]
The permittee can elect to meet the total reduced sulfur (TRS) emission limitation (Option 2).

2.f Table 44 of [see section A.VI.] shows which parts of the General Provision in 40 CFR Part 63.1 through 63.15 apply to this emissions unit.

2.g [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.h [63.1569(a)(2)]
As provided in 40 CFR Part 63.6(g), the US 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. The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward.

   [63.1568(a)] REQUIREMENTS FOR HAP EMISSIONS FROM SULFUR RECOVERY UNITS

   a. [63.1568(a)(2)]
   The permittee must meet each operating limit in Table 30 [see section A.VI.] that applies to this emissions unit.

   b. [63.1568(a)(3)]
   The permittee must prepare an operation, maintenance, and monitoring plan according to the requirements in 40 CFR Part 63.1574(f) [see section A.IV.] and operate at all times according to the procedures in the plan.

2. [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 Part 63.1574(f) [see section A.IV.] and operate at all times according to the procedures in the plan.

III Monitoring and/or Recordkeeping

1. The permittee shall maintain daily records of the following information, while the emissions unit is in operation:

   a. the total amount of sulfur processed (see A.I.2.a);

b. the total SO_2 emissions, in pounds, from the Claus unit and the flare(s); and

c. the average SO_2 emission rate, in pound of SO_2 per pound of sulfur processed.

2. In order to demonstrate compliance with the emission limitations of 100 lbs of SO2/1,000 lbs of sulfur processed at the Claus unit, the permittee shall operate and maintain an instrument for continuously monitoring and recording the SO2 emission rate in terms of the applicable standards for emissions units P002, P011, and P015, combined. The monitoring shall be conducted in accordance with 40 CFR 60.13, as follows:

   a. The span value for this instrument is 125 percent of the applicable SO2 emission limitation.

   b. The performance evaluations for this SO2 monitor under 40 CFR 60.13 shall use Performance Specification 2 of 40 CFR 60, Appendix B.

   The permittee shall conduct an annual relative accuracy test audit (RATA) for the SO2 continuous emission monitoring equipment. Method 6 of 40 CFR Part 60, Appendix A, or other approved U.S. EPA methods shall be used for conducting the annual RATAs.

3. A statement of certification of the existing SO2 continuous emission monitoring system (CEMS) 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 2. Proof of certification shall be made available to representatives of the appropriate Ohio EPA District Office or local air agency upon request.

4. The permittee shall maintain records of all data obtained by the continuous SO2 CEMS including, but not limited to, parts per million SO2 on an instantaneous (1-minute) basis, emissions of SO2 in units of the applicable standard (lb/1,000 lbs of sulfur processed) as a rolling, 30-day average, the results of daily zero/span calibration checks, and the magnitudes of manual calibration adjustments.

5. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the SO2 CEMS designed to ensure continuous valid and representative readings of SO2. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous SO2 monitoring system must be kept on site and available for inspection during regular office hours.

6. The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward.
   [63.1570] GENERAL COMPLIANCE REQUIREMENTS - 40 CFR Part 63, Subpart UUU

a. [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 Part 63.6(f)(1).

b. [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 Part 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.

c. [63.1570(d)]
The permittee must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in 40 CFR Part 63.6(e)(3).

d. [63.1570(e)]
During periods of startup, shutdown, and malfunction, the permittee must operate in accordance with the SSMP.

g. [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 Part 63.1575 [see section A.IV.].

f. [63.1570(g)]
Consistent with 40 CFR Part 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 Part 63.6(e) and the contents of the SSMP.

7. [63.1572] MONITORING, INSTALLATION, OPERATION, AND MAINTENANCE REQUIREMENTS [Tables 40 and 41] - 40 CFR Part 63, Subpart UUU

a. [63.1572(a)]
The permittee must install, operate, and maintain each continuous emission monitoring system according to the requirements in 40 CFR Part 63.1572(a)(1) through (4) [paragraphs a.i. through a.iv. of this section].

i. [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.].

ii. [63.1572(a)(2)]
If the permittee uses a continuous emission monitoring system to meet the NSPS CO or SO2 limit, the permittee must conduct a performance evaluation of each continuous emission monitoring system according to the requirements in 40 CFR Part 63.8. This requirement does not apply to an affected emissions unit subject to the NSPS that has already demonstrated initial compliance with the applicable performance specification.

iii. [63.1572(a)(3)]
As specified in 40 CFR Part 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.

iv. [63.1572(a)(4)]
Data must be reduced as specified in 40 CFR Part 63.8(g)(2).

b. [63.1572(d)]
The permittee must monitor and collect data according to the requirements in 40 CFR Part 63.1572(d)(1) and (d)(2) [see paragraph b.i. and b.ii. of this section].

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 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.

8. [63.1576] RECORD KEEPING REQUIREMENTS - 40 CFR Part 63, Subpart UUU

a. [63.1576(a)]
The permittee must keep the records specified in 63.1576(a)(1) through (3) [paragraphs a.i through a.iii. of this section].

i. [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 Part 63.10(b)(2)(xiv).

ii. [63.1576(a)(2)]
The records in 40 CFR Part 63.6(e)(1)(iii) through (v) related to startup, shutdown, and malfunction.

iii. [63.1576(a)(3)]
Records of performance tests, performance evaluations, and visible emission observations as required in 40 CFR Part 63.10(b)(2)(viii).

b. [63.1576(b)]
For each continuous emission monitoring system and continuous opacity monitoring system, the permittee must keep the records required in 63.1576(b)(1) through (5) [paragraphs b.i. through b.v. of this section].

i. [63.1576(b)(1)]
Records described in 40 CFR Part 63.10(b)(2)(vi) through (xi) of Subpart A.

ii. [63.1576(b)(2)]
Monitoring data for continuous opacity monitoring systems during a performance evaluation as required in 40 CFR Part 63.6(h)(7)(i) and (ii) of Subpart A.

iii. [63.1576(b)(3)]
Previous (i.e., superceded) versions of the performance evaluation plan as required in 40 CFR Part 63.8(d)(3) of Subpart A.

iv. [63.1576(b)(4)]
Requests for alternatives to the relative accuracy test for continuous emission monitoring systems as required in 40 CFR Part 63.8(f)(6)(i) of Subpart A.

v. [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.

c. [63.1576(c)]
The permittee must keep the records in 40 CFR Part 63.6(h) for visible emission observations.

d. [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.

e. [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.

f. [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.

g. [63.1576(g)]
The records must be in a form suitable and readily available for expeditious review according to 40 CFR Part 63.10(b)(1).

h. [63.1576(h)]
As specified in 40 CFR Part 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.

i. [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 Part 63.10(b)(1). The permittee can keep the records offsite for the remaining 3 years.

IV Reporting Requirements

1. The permittee shall submit quarterly excess emission and data assessment reports to the appropriate Ohio EPA District Office or local air agency by January 30, April 30, July 30 and October 30 of each year detailing the data obtained from the CEMS of the SRU during the previous quarter. The report shall include the percent availability of the SRU, the dates, duration, amounts (tons), and points of emission of excess sulfur dioxide emissions that are caused by malfunctions or shutdowns of the amine unit, sour water stripper, or the SRU, and an analysis of the cause of and corrective action taken for each malfunction (including any bypassing of the amine-claus SRU to the refinery flare system) or shutdown. The report shall also include all instances of daily SO2 values in excess of the limitation specified in OAC rule 3745-18-08(C)(3).

2. The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any SO2 CEMS 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 source 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 the quarterly report.

3. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) on a quarterly basis, in writing, of all rolling, 30-day periods during which the average SO2 emissions as measured by the SO2 CEMS under 40 CFR 60.13 exceeds 100 lbs of SO2 per 1,000 lbs of sulfur processed at the Claus unit. The rolling, 30-day average shall be determined as the arithmetic average of 30 contiguous 24-hour averages. The notification shall include a copy of the record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) by January 30, April 30, July 30 and October 30 of each year and shall address the data obtained during the previous calendar quarters. These reports shall also contain the total SO2 emissions for the calendar quarter (in tons).

4. If there are no excess SO2 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.

5. The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward except as stated in 40 CFR Part 63.1574 which may have reports due before April 11, 2005.

[63.1574] NOTIFICATION SUBMITTAL - 40 CFR Part 63, Subpart UUU

a. [63.1574(a)]
Except as allowed in 40 CFR Part 63.1574(a)(1) through (a)(3) [paragraphs a.i. through a.iii. of this section], the permittee must submit all of the notifications in 40 CFR Part 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.

i. [63.1574(a)(1)]
The permittee must submit the notification of the intention to construct or reconstruct according to 40 CFR Part 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 Part 63.5(d)(1)(i) and 63.5(f)(2).

ii. [63.1574(a)(2)]
The permittee must submit the notification of intent to conduct a performance test required in 40 CFR Part 63.7(b) at least 30 calendar days before the performance test is scheduled to begin (instead of 60 days).

iii. [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 Part 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.

(a) [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.

b. [63.1574(c)]
As specified in 40 CFR Part 63.9(b)(3), if the permittee starts the new or reconstructed affected emissions unit on or after April 11, 2002, the permittee must submit the initial notification no later than 120 days after April 11, 2005.

c. [63.1574(d)]
The permittee also must include the information in Table 42 [see section A.VI.] in the notification of compliance status.

d. [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 emissions unit, 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 appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency for review and approval and comply with the plan until the change is approved.

ii. [63.1574(f)(2)]
Each plan must include, at a minimum, the applicable information as specified in 40 CFR Part 63.1574(f)(2)(i) through (x) [paragraphs d.ii.(a) through d.ii.(e) of this section].

(a) [63.1574(f)(2)(i)]
Process and control device parameters to be monitored for each affected emissions unit, 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 emissions unit.

(c) [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).

(d) [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 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.

(e) [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.

6. [63.1575] REPORTS FOR 40 CFR Part 63, Subpart UUU

a. [63.1575(a)]
The permittee must submit each report in Table 43 [see section A.VI.] that applies to this emissions unit.

b. [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 Part 63.1575(b)(1) through (b)(5) [see paragraphs b.i. through b.v. of this section].

i. [63.1575(b)(1)]
The first compliance report must cover the period beginning April 11, 2005 and ending on June 30, 2005.

ii. [63.1575(b)(2)]
The first compliance report must be postmarked or delivered no later than July 31, 2005.

iii. [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.

iv. [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.

v. [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 paragraphs b.i. through b.iv. of this section].

c. [63.1575(c)]
The compliance report must contain the following information:

i. [63.1575(c)(1)]
Company name and address.

ii. [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.

iii. [63.1575(c)(3)]
Date of report and beginning and ending dates of the reporting period.

iv. [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.

d. [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) [paragraphs c.i. through c.iii. of this section] and the information in 63.1575(d)(1) through (d)(3) [paragraphs d.i. through d.iii. of this section].

i. [63.1575(d)(1)]
The total operating time of each affected emissions unit during the reporting period.

ii. [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.

iii. [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).

e. [63.1575(e)]
For each deviation from an emission limitation occurring at an affected emissions unit where a continuous opacity monitoring system or a continuous emission monitoring system is used to comply with the emission limitation, the permittee must include the information in 40 CFR Part 63.1575(d)(1) through(3) [paragraphs d.i. through d.iii. of this section] and the information in 63.1575(e)(1) through (13) [paragraphs e.i through e.xiii. of this section].

i. [63.1575(e)(1)]
The date and time that each malfunction started and stopped.

ii. [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.

iii. [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 Part 63.8(c)(8) of Subpart A.

iv. [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.

v. [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.

vi. [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.

vii. [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.

viii. [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.

ix. [63.1575(e)(9)]
An identification of each HAP that was monitored at the affected emissions unit.

x. [63.1575(e)(10)]
A brief description of the process units.

xi. [63.1575(e)(11)]
The monitoring equipment manufacturer(s) and model number(s).

xii. [63.1575(e)(12)]
The date of the latest certification or audit for the continuous opacity monitoring system or continuous emission monitoring system.

xiii. [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.

f. [63.1575(f)]
The permittee also must include the information required in 63.1575(f)(1) through (f)(2) [paragraphs f.i. and f.ii. of this section] in each compliance report, if applicable.

i. [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.

ii. [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.

g. [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.

h. [63.1575(h)]
The reporting requirements in paragraphs 63.1575(h)(1) and (2) [paragraphs h.i. and h.ii. of this section] apply to startups, shutdowns, and malfunctions:

i. [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 Part 63.6(e)(3)(iii) and 63.10(d)(5) do not apply.

ii. [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 Part 63.6(e)(3)(iv) and 63.10(d)(5) do not apply.

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:

1.a Emission Limitation:

100 lbs of SO2 per 1,000 lbs of sulfur processed at the Claus unit for emissions units P002, P011, and P015, combined

Applicable Compliance Method:

Compliance shall be based upon the results of the continuous emission monitoring as required in section A.III. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with Method 6 of 40 CFR Part 60, Appendix A.

2. 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.

[63.1568] DEMONSTRATING COMPLIANCE WITH THE WORK PRACTICE STANDARDS AND EMISSION LIMITATIONS FROM SULFUR RECOVERY UNITS

a. [63.1568(b)] DEMONSTRATING INITIAL COMPLIANCE
The permittee must:

i. [63.1568(b)(1)]
Install, operate, and maintain a continuous monitoring system according to the requirements in 40 CFR Part 63.1572 [see section A.III.] and Table 31 [see section A.VI.].

ii. [63.1568(b)(2)]
Conduct each performance test for a sulfur recovery unit not subject to the NSPS for sulfur oxides according to the requirements in 40 CFR Part 63.1571 [see section A.V.] and under the conditions specified in Table 32 [see section A.VI.].

iii. [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.].

iv. [63.1568(b)(4)]
Correct the reduced sulfur samples to zero percent excess air using Equation 1 of this section as follows:

(Eq. 1)

Cadj = Cmeas [20.9c / (20.9 - %O2)]

where:

Cadj = pollutant concentration adjusted to zero percent oxygen, ppm or g/dscm;
Cmeas = pollutant concentration measured on a dry basis, ppm or g/dscm;
20.9c = 20.9 percent oxygen?0.0 percent oxygen (defined oxygen correction basis), percent;
20.9 = oxygen concentration in air, percent; and
%O2 = oxygen concentration measured on a dry basis, percent.

v. [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.].

vi. [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 appropriate Ohio EPA District Office or local air agency as part of the notification of compliance status.

vii. [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 Part 63.1574 [see section A.IV.].

b. [63.1568(c)] DEMONSTRATING CONTINUOUS COMPLIANCE
The permittee must

i. [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.

ii. [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.

3. [63.1569(b)] DEMONSTRATING INITIAL COMPLIANCE WITH THE HAP EMISSION LIMITATIONS FROM BYPASS LINES - 40 CFR Part 63, Subpart UUU

a. [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 Part 63.1571 [see section A.V.] and under the conditions specified in Table 37 [see section A.VI.].

b. [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.].

c. [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 appropriate Ohio EPA District Office or local air agency as part of the notification of compliance status.

d. [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 Part 63.1574 [see section A.IV.].

4. [63.1569(c)] DEMONSTRATING CONTINUOUS COMPLIANCE WITH THE WORK PRACTICE STANDARDS FOR BYPASS LINES - 40 CFR Part 63, Subpart UUU

a. [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.].

b. [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.

5. [63.1571] PERFORMANCE TEST AND OTHER INITIAL COMPLIANCE DEMONSTRATION - 40 CFR Part 63, Subpart UUU

a. [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 Part 63.6(a)(2) of Subpart A.

i. [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.

ii. [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.

b. [63.1571(b)] GENERAL REQUIREMENTS FOR PERFORMANCE TESTS AND PERFORMANCE EVALUATIONS
The permittee must:

i. [63.1571(b)(1)]
Conduct each performance test according to the requirements in 40 CFR Part 63.7(e)(1).

ii. [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 Part 63.7(e)(3). Each test run must last at least 1 hour.

iii. [63.1571(b)(3)]
Conduct each performance evaluation according to the requirements in 40 CFR Part 63.8(e).

iv. [63.1571(b)(4)]
Not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in 40 CFR Part 63.7(e)(1).

c. [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 appropriate Ohio EPA District Office or local air agency. An engineering assessment may include the approaches listed in 40 CFR Part 63.1571(c)(1) through (c)(4) [paragraphs c.i. through c.iv. of this section]. Other engineering assessments may be used but are subject to review and approval by the appropriate Ohio EPA District Office or local air agency.

i. [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;

ii. [63.1571(c)(2)]
The permittee may use bench-scale or pilot-scale test data representative of the process under representative operating conditions;

iii. [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

iv. [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:

(a) [63.1571(c)(4)(i)]
Use of material balances based on process stoichiometry to estimate maximum TOC concentrations;

(b) [63.1571(c)(4)(ii)]
Calculation of hourly average maximum flow rate based on physical equipment design such as pump or blower capacities; and

(c) [63.1571(c)(4)(iii)]
Calculation of TOC concentrations based on saturation conditions.

d. [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 the Notification of Compliance Status, demonstrating to the satisfaction of the appropriate Ohio EPA District Office or local air agency, that the affected emissions unit complies with the applicable emission limit at the operating limit based on adjusted values.

e. [63.1571(e)]
The permittee may change the established operating limit by meeting the requirements in 63.1571(e)(1) through (2) [paragraphs e.i. through e.ii. of this section].

i. [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.

ii. [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) [paragraph e.i. of this section].

VI Miscellaneous Requirements

1. For all references to the tables in 40 CFR Part 63, Subpart UUU, see the attached document entitled "Attachment #2 (SRU)".

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Process (P017)
Activity Description: Aromatics process: Extraction column (PR 164477), Thermal Hydroalkylation Reactor (PR 164565), Stripper Column (PR 164478), Benzene Recovery Column (PR164480), Cold Box (No PR)

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
aromatics process - extraction column (PR 164477), thermal hydroalkylation reactor (PR 164565), stripper column (PR 164478), benzene recovery column (PR 164480), and cold box (no PR number) with benzene vent scrubber	40 CFR Part 61, Subpart J	See section A.I.2.a through A.I.2.c and A.III.1.
	40 CFR Part 61, Subpart V	See section A.III.1.
	OAC rule 3745-21-09(T)	See section A.III.1.

2. Additional Terms and Conditions

2.a [40 CFR 61.110(a)]

The provisions of this subpart apply to each of the following sources that are intended to operate in benzene service: pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, and control devices or systems required by this subpart.

2.b [40 CFR 61.110(c)(1)]

If the permittee applies for one of the following exemptions, then records shall be maintained as required in 40 CFR 61.246(i):

i. Any equipment in benzene service that is located at a plant site designed to produce or use less than 1,000 megagrams (1,102 tons) of benzene per year is exempt from the requirements of 40 CFR 61.112.

ii. Any process unit (defined in 40 CFR 61.241) that has no equipment in benzene service is exempt from the requirements of 40 CFR 61.112.

2.c [40 CFR 61.112 Standards]

i. The permittee subject to the provisions of this subpart shall comply with the requirements of 40 CFR Part 61, Subpart V.

ii. The permittee may elect to comply with the requirements of 40 CFR 61.243-1 and 40 CFR 61.243-2.

iii. The permittee may apply to the Administrator for a determination of an alternative means of emission limitation that achieves a reduction in emissions of benzene at least equivalent to the reduction in emissions of benzene achieved by the controls required in this subpart. In doing so, the permittee shall comply with requirements of 40 CFR 61.244.

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. The permittee shall include the aromatics process fugitive emissions and associated components in the current site fugitive leak detection and repair (LDAR) program. The LDAR program shall be conducted in accordance with OAC rule 3745-21-09(T), 40 CFR Part 61, Subpart J, and 40 CFR Part 61, Subpart V. Applicable requirements are listed in Part II - Specific Facility Terms and Conditions of this permit.

IV Reporting Requirements

1. The permittee shall submit LDAR reports in accordance with the LDAR reporting requirements for OAC rule 3745-21-09(T) and 40 CFR 61.247, listed in Part II - Specific Facility Terms and Conditions of this permit.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Process (P018)
Activity Description: Isomerization process: Stabilizer tower (PR 164491), Isomerization Reactor (PR 164976-head)(PR 164977-tail), Fuel Gas Scrubber (PR 164489)

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
isomerization process fugitive emissions: stabilizer tower (PR 164491), isomerization reactor (PR 164976 - head, PR 164977 - tail), and fuel gas scrubber (PR 164489)	OAC rule 3745-21-09(T)	See section A.III.1.
	40 CFR Part 60, Subpart GGG and Subpart VV	See sections A.I.2.a through A.I.2.k and A.III.2 through A.III.7.

2. Additional Terms and Conditions

2.a The permittee shall comply with the requirements of 40 CFR 60.482-1 to 60.482-10 as soon as practical, but no later than 180 days after initial startup. [40 CFR 60.592(a)]

2.b The permittee may elect to comply with the requirements of 40 CFR 60.483-1 and 60.483-2. [40 CFR 60.592(b)]

2.c The permittee may apply to the Administrator of the U.S. EPA for a determination of equivalency for any means of emission limitation that achieves a reduction in emissions of volatile organic compounds (VOC) at least equivalent to the reduction in emissions of VOC achieved by the controls required in this subpart. In doing so, the permittee shall comply with requirements of 40 CFR 60.484. [40 CFR 60.592(c)]

2.d The permittee shall comply with the provisions of 40 CFR 60.485 except as provided in 40 CFR 60.593. [40 CFR 60.592(d)]

2.e The permittee shall comply with the provisions of 40 CFR 60.486 and 60.487. [40 CFR 60.592(e)]

2.f 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 40 CFR 60.482-1(c) and paragraph (h) and (i) of 40 CFR 60.482-3. [40 CFR 60.482-3(a)]

2.g Each compressor seal system shall be operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or 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 60.482-10; or equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere. [40 CFR 60.482-3(b)(1)-(3)]

2.h The barrier fluid system shall be in heavy liquid service or shall not be in VOC service. [40 CFR 60.482-3(c)]

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

2.j A compressor is exempt from the requirements of 40 CFR 60.482-3(a) and 40 CFR 60.482-3(b) if it is equipped with a closed vent system to capture and transport leakage from the compressor drive shaft back to a process or fuel gas system or to a control device that complies with the requirements of 40 CFR 60.482-10, except as provided in 40 CFR 60.482-3(i). [40 CFR 60.482-3(h)]

2.k Any existing reciprocating compressor in a process unit which becomes an affected facility under provisions of 40 CFR 60.14 or 40 CFR 60.15 is exempt from 40 CFR 60.482(a), (b), (c), (d), (e) and (h), 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 40 CFR 60.482(a), (b), (c), (d), (e) and (h). [40 CFR 60.482-3(j)]

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. The permittee shall include the isomerization process fugitive emissions and associated components in the current site fugitive leak detection and repair (LDAR) program. The LDAR program shall be conducted in accordance with OAC rule 3745-21-09(T); 40 CFR Part 60,

Subpart GGG; and 40 CFR Part 60, Subpart VV. Applicable requirements are listed in Part II - Specific Facility Terms and Conditions of this permit.

2. Each sensor shall be checked daily or shall be equipped with an audible alarm. [40 CFR 60.482-3(e)(1)]

3. 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. [40 CFR 60.482-3(e)(2)]

4. 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. [40 CFR 60.482-3(f)]

5. 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 60.482-9. [40 CFR 60.482-3(g)(1)]

6. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-3(g)(2)]

7. Any compressor that is designated, as described in 40 CFR 60.486(e)(1) and (2), 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 60.482-3(a) through (h) if the compressor:

   a. is demonstrated to be operating with no detectable emissions, as indicated an instrument reading of less than 500 ppm above background, as measured by the methods specified in 40 CFR 60.485(c); and

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

   [40 CFR 60.482-3(i)(1) and (2)]

IV Reporting Requirements

1. The permittee shall submit LDAR reports in accordance with the LDAR reporting requirements for OAC rule 3745-21-09(T) and 40 CFR 60.487, listed in Part II - Specific Facility Terms and Conditions of this permit.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Loading Rack (P019)
Activity Description: Benzene Unit train loading rack

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
benzene unit train loading rack with benzene vent scrubber or LIU flare	OAC rule 3745-31-05(A)(3) (PTI 03-1138)	1.53 lbs of organic compounds (OC)/hr and 6.70 tons of OC/yr
	40 CFR Part 61, Subpart J	See sections A.I.2.a through A.I.2.c and A.III.1.
	40 CFR Part 61, Subpart V	See section A.III.1.
	40 CFR Part 61, Subpart BB	See sections A.I.2.e through A.I.2.m, A.III.4 through A.III.9, A.IV.1, and A.V.1.b through A.V.1.g.
	OAC rule 3745-21-07(E)	exempt See section A.I.2.d.

2. **Additional Terms and Conditions**

2.a [40 CFR 61.110(a)]
The provisions of this subpart apply to each of the following sources that are intended to operate in benzene service: pumps, compressors, pressure relief devices, sampling

connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, and control devices or systems required by this subpart.

2.b [40 CFR 61.110(c)(1)]
If the permittee applies for one of the following exemptions, then records shall be maintained as required in 40 CFR 61.246(i):

i. Any equipment in benzene service that is located at a plant site designed to produce or use less than 1,000 megagrams (1,102 tons) of benzene per year is exempt from the requirements of 40 CFR 61.112.

ii. Any process unit (defined in 40 CFR 61.241) that has no equipment in benzene service is exempt from the requirements of 40 CFR 61.112.

2.c [40 CFR 61.112 Standards]

i. The permittee subject to the provisions of this subpart shall comply with the requirements of 40 CFR Part 61, Subpart V.

ii. The permittee may elect to comply with the requirements of 40 CFR 61.243-1 and 40 CFR 61.243-2.

iii. The permittee may apply to the Administrator for a determination of an alternative means of emission limitation that achieves a reduction in emissions of benzene at least equivalent to the reduction in emissions of benzene achieved by the controls required in this subpart. In doing so, the permittee shall comply with requirements of 40 CFR 61.244.

2.d This emissions unit is exempt from the requirements of OAC rule 3745-21-07(E) pursuant to the requirements of OAC rule 3745-21-07(A)(1). This facility is not located in one of the Priority 1 counties identified in OAC rule 3745-21-06(A).

2.e [40 CFR 61.302(a)]
The permittee shall equip each loading rack with a vapor collection system that is:

i. Designed to collect all benzene vapors displaced from railcars during loading, and

ii. Designed to prevent any benzene vapors collected at one loading rack from passing through another loading rack to the atmosphere.

2.f [40 CFR 61.302(b)]
The permittee shall install a control device and reduce benzene emissions routed to the atmosphere through the control device by 98 weight percent.

2.g [40 CFR 61.302(d)]
The permittee shall limit the loading of benzene into vapor-tight railcars using the following alternative method for each car every fifth time the car is loaded:

i. Connect the loading arms, vent connections, grounding cable, etc. per the loading procedures.

ii. Pressurize each car with nitrogen to 30-35 psig.

iii. While the strings are pressurizing, open all isolation boxes.

iv. When the nitrogen pressure reaches 30-35 psig at the vent end pressure garage of each car, close the nitrogen valve to each car.

v. Using liquid soap, spray each of the following: every flange, interconnecting hose flanges, isolation valves, safety valves, bleed valves, manways (top and bottom), air to open connections, air to close connections, and level probe connections.

vi. Report any and all leaks to the Operating Supervisor and record this finding on the Pressure Test Procedure Form.

vii. Repair all leaks.

viii. If a major repair is needed, such as changing out a safety valve or replacing a valve or hose gasket; after the repair, repressure that particular car and re-soap for leaks.

ix. When all leaks are repaired or if there were no leaks, slowly release the pressure from each car to 10 psig or less to the benzene vent scrubber.

x. Continue with the normal loading procedure.

2.h [40 CFR 61.302(f)]
The permittee shall limit loading of benzene to railcars equipped with vapor collection equipment that is compatible with the affected facility's vapor collection system.

i. [40 CFR 61.302(g)]
The permittee shall limit loading of railcars to railcars whose collection systems are connected to the affected facility's vapor collection systems.

2.j [40 CFR 61.302(h)]
The permittee shall ensure that the vapor collection and benzene loading equipment of railcars shall be designed and operated to prevent gauge pressure in the railcar tank from exceeding, during loading, the initial pressure the tank was pressured up to and shown to be vapor tight at during the most recent vapor-tightness test using Method 27 of Appendix A to 40 CFR Part 60. This vapor-tightness test pressure is not to be exceeded when measured by the procedures specified in 40 CFR 61.304(c).

2.k [40 CFR 61.302(i)]
The permittee shall ensure that no pressure-vacuum vent in the affected facility's vapor collection system for railcars shall begin to open at a system pressure less than the maximum pressure at which the railcar is operated.

2.l [40 CFR 61.302(k)]
The permittee shall inspect the vapor collection system and the control device for detectable emissions, and shall repair any leaks detected, in accordance with 40 CFR 61.242-11 (e) and (f). This inspection of the vapor collection system and control device shall be done during the loading of railcars.

2.m [40 CFR 61.302(l)]
Vent systems that contain valves that could divert a vent stream from a control device shall have car-sealed opened all valves in the vent system from the emission source to the control device, and car-sealed closed all valves in the vent system that would lead the vent stream to the atmosphere, either directly or indirectly, bypassing the control device.

II Operational Restrictions

1. The permittee shall use submerged fill whenever this emissions unit is in operation.

2. Pursuant to the U.S. EPA approval letter dated November 12, 1998 for alternate monitoring parameters in accordance with 40 CFR 63.151(g), the following operating parameters shall be met by the permittee:

   a. benzene vent scrubber:

      i. maintain the lean solvent temperature less than 120 degrees Fahrenheit.

      ii. maintain the rich solvent pH greater than 6.5.

      iii. maintain the rich solvent percent hydrocarbon less than 10 percent.

b. tetra stripper solvent regenerator:

i. maintain the bottoms temperature greater than 275 degrees Fahrenheit.

3. The permittee shall operate the benzene vent scrubber as the control device for this emissions unit whenever clean railcars are being loaded.

4. The permittee shall operate the LIU flare as the control device for this emissions unit whenever railcars are being loaded that contain residual volatile material. Terms and conditions for operation of the LIU flare are listed for emissions unit P007.

III Monitoring and/or Recordkeeping

1. The permittee shall include the benzene unit train loading rack fugitive emissions and associated components in the current site fugitive leak detection and repair (LDAR) program. The LDAR program shall be conducted in accordance with OAC rule 3745-21-09(T); 40 CFR Part 61, Subpart J; and 40 CFR Part 61, Subpart V. Applicable requirements are listed in Part II - Specific Facility Terms and Conditions of this permit.

2. The permittee shall calibrate, maintain, and operate according to manufacturers specifications, device(s) to continuously monitor the temperature of the scrubber absorbing fluid. The device(s) shall be operated such that the benzene vent scrubber lean solvent temperature and tetra stripper solvent regeneration bottoms temperature can be determined.

3. The permittee shall obtain daily samples of the scrubber absorbing fluid and conduct an analysis of the fluid for rich solvent pH and rich solvent percent hydrocarbon.

4. [40 CFR 61.303(e)]
The permittee of an affected facility who wishes to demonstrate compliance with the standards specified under 40 CFR 61.302(b) using control devices other than an incinerator, steam generating unit, process heater, carbon adsorber, or flare shall provide the Administrator with 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.

5. [40 CFR 61.303(f)]
Each permittee of an affected facility complying with 40 CFR 61.302(e)(1) shall install, calibrate, maintain, and operate a recording pressure measurement device (magnehelic gauge or equivalent device) and an audible and visible alarm system that is activated when the pressure vacuum specified in 40 CFR 61.302(e)(1) is not attained. The permittee shall place the alarm system so that it can be seen and heard where cargo transfer is controlled and on the open deck.

6. [40 CFR 61.303(g)]
Permittees using a vent system that contains valves that could divert a vent stream from a control device used to comply with the provisions of this subpart shall do one or a combination of the following:

   a. Install a flow indicator immediately downstream of each valve that if opened would allow a vent stream to bypass the control device and be emitted, either directly or indirectly, to the atmosphere. The flow indicator shall be capable of recording flow at least once every 15 minutes.

   b. Monitor the valves once a month, checking the position of the valves and the condition of the car seal, and identify all times when the car seals have been broken and the valve position has been changed (i.e.,from opened to closed for valves in the vent piping to the control device and from closed to open for valves that allow the stream to be vented directly or indirectly to the atmosphere).

7. [40 CFR 61.305(c)]
If a vent system containing valves that could divert the emission stream away from the control device is used, each permittee subject to the provisions of this subpart shall keep for at least 2 years up-to-date, readily accessible continuous records of:

   a. All periods when flow is indicated if flow indicators are installed under 40 CFR 61.303(g)(1).

   b. All times when maintenance is performed on car-sealed valves, when the car seal is broken, and when the valve position is changed (i.e., from open to closed for valves in the vent piping to the control device and from closed to open for valves that vent the stream directly or indirectly to the atmosphere bypassing the control device) if valves are monitored under 40 CFR 60.303(g)(2).

8. [40 CFR 61.305(g)]
The permittee of an affected facility shall keep the vapor-tightness documentation required under 40 CFR 61.302(d) on file at the affected facility in a permanent form available for inspection.

9. [40 CFR 61.305(h)]
The permittee of an affected facility shall update the documentation file required under 40 CFR 61.302(d) for each railcar at least once per year to reflect current test results as determined by the appropriate method. The permittee shall include, as a minimum, the following information in this documentation:

   a. test title;

b. railcar owner and address;

c. railcar identification number;

d. testing location;

e. date of test;

f. tester name and signature;

g. witnessing inspector: name, signature, and affiliation;

h. test results, including, for railcars, the initial pressure up to which the tank was pressured at the start of the test, and any repairs that were necessary to ensure vapor tightness; and

i. a checklist indicating that each of the procedures outlined in the alternative method has been followed.

IV Reporting Requirements

1. [40 CFR 61.305(f)]
Each permittee of an affected facility subject to the requirements of 40 CFR 61.302 shall submit to the Administrator quarterly reports of the following information. The permittee shall submit the initial report within 90 days after the effective date of this subpart or 90 days after startup for a source that has an initial startup date after the effective date.

   a. all periods recorded under 40 CFR 61.305(c)(1) when the vent stream is diverted from the control device;

   b. all times recorded under 40 CFR 61.305(c)(2) when maintenance is performed on car-sealed valves, when the car seal is broken, and when the valve position is changed; and

   c. all deviations from the operational restrictions in sections A.II.2.a and A.II.2.b of this permit.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

1.53 lbs of OC/hr, 6.70 tons of OC/yr

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be based upon the record keeping requirements specified in sections A.III.2 through A.III.9 of this permit. Compliance with the annual emission limitation shall be assumed as long as compliance with the hourly emission limitation is maintained (the annual emission limitation was calculated by multiplying the hourly emission limitation by 8760 hrs/yr and dividing by 2000lbs/ton).

If required, the permittee shall demonstrate compliance with the hourly allowable OC emission limitation by conducting emission testing in accordance with Methods 1 through 4 and Method 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

1.b [40 CFR 61.304(a)(1)-(4)]
The procedures for determining compliance with 40 CFR 61.302(b) for all control devices other than flares is as follows:

i. All testing equipment shall be prepared and installed as specified in the appropriate test methods.

ii. The time period for a performance test shall be not less than 6 hours, during which at least 300,000 liters of benzene are loaded. If the throughput criterion is not met during the initial 6 hours, the test may be either continued until the throughput criterion is met, or resumed the next day with at least another 6 complete hours of testing.

iii. For intermittent control devices:

(1) The vapor holder level of the intermittent control device shall be recorded at the start of the performance test. The end of the performance test shall coincide with the time when the vapor holder is at its original level.

(2) At least two startups and shutdowns of the control device shall occur during the performance test. If this does not occur under an automatically controlled operation, the system shall be manually controlled.

iv. An emission testing interval shall consist of each 5-minute period during the performance test. For each interval:

(1) The reading from each measurement instrument shall be recorded.

(2) Method 1 or 1A of 40 CFR Part 60, Appendix A, as appropriate, shall be used for selection of the sampling site.

(3) The volume exhausted shall be determined using Method 2, 2A, 2C, or 2D of 40 CFR Part 60, Appendix A, as appropriate.

(4) The average benzene concentration upstream and downstream of the control device in the vent shall be determined using Method 25A or Method 25B of 40 CFR Part 60, Appendix A, using benzene as the calibration gas. The average benzene concentration shall correspond to the volume measurement by taking into account the sampling system response time.

1.c [40 CFR 61.304(a)(5)]
The mass emitted during each testing interval shall be calculated as follows:

Mi = FKVsC

where:

Mi = Mass of benzene emitted during testing interval i, kg;

Vs = Volume of air-vapor mixture exhausted, m3 at standard conditions;

C = Benzene concentration (as measured) at the exhaust vent, ppmv;

K = Density, (kg/m3 benzene), standard conditions;

K = 3.25 for benzene;

F = Conversion factor, (m3 benzene/m3 air)(1/ppmv);

F = 10^-6; and

s = Standard conditions, 20 degrees Celsius and 760 mm Hg.

1.d [40 CFR 61.304(a)(6)]
The benzene mass emission rates before and after the control device shall be calculated as follows:

E = (summation of Mi, i=1,n)/T

where:

E = Mass flow rate of benzene emitted, kg/hr;

Mi = Mass of benzene emitted during testing interval i, kg;

T = Total time of all testing intervals, hr; and

n = Number of testing intervals.

1.e [40 CFR 61.304(a)(7)]
The percent reduction across the control device shall be calculated as follows:

R = [(Eb-Ea)/Eb](100)

where:

R = Control efficiency of control device, %;

Eb = Mass flow rate of benzene prior to control device, kg/hr; and

Ea = Mass flow rate of benzene after control device, kg/hr.

1.f [40 CFR 61.304(c)]
For the purpose of determining compliance with 40 CFR 61.302(h), the following procedures shall be used:

i. Calibrate and install a pressure measurement device (liquid manometer, magnehelic gauge, or equivalent instrument), which has a precision of +/- 2.5 mm water in the range that the railcar was initially pressured to during the most recent vapor-tightness test.

ii. Connect the pressure measurement device to a pressure tap in the affected facility's vapor collection system, located as close as possible to the connection with the railcar.

iii. During the performance test, record the pressure every 5 minutes while a railcar is being loaded, and record the highest instantaneous pressure that occurs during each loading cycle. Every loading rack shall be tested at least once during the performance test.

iv. If more than one loading rack is used simultaneously, then the performance test shall be conducted simultaneously to represent the maximum capacity.

1.g [40 CFR 61.304(e)]
Immediately prior to a performance test required for determination of compliance with 40 CFR 61.302(b), all potential sources of vapor leakage in the affected facility's vapor collection system equipment shall be inspected for detectable emissions as required in 40 CFR 61.302(k). The

monitoring shall be conducted only while a vapor-tight railcar is being loaded. All identified leaks in the terminal's vapor collection system shall be repaired prior to conducting the performance test.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Loading Rack (P023)
Activity Description: Benzene Single RR Car and TK Truck Loading Rack

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
benzene single railroad car and tank truck loading rack with benzene vent scrubber or LIU flare	OAC rule 3745-31-05(A)(3) (PTI 03-2072)	0.51 lb of organic compounds (OC)/hr and 2.23 tons of OC/yr
	40 CFR Part 61, Subpart J	See sections A.I.2.a through A.I.2.c and A.III.1.
	40 CFR Part 61, Subpart V	See section A.III.1.
	40 CFR Part 61, Subpart BB	See section A.I.2.e through A.I.2.m, A.III.4 through A.III.9, A.IV.1, and A.V.1.b through A.V.1.g.
	OAC rule 3745-21-07(E)	exempt See section A.I.2.d.

2. **Additional Terms and Conditions**

2.a [40 CFR 61.110(a)]
The provisions of this subpart apply to each of the following sources that are intended to operate in benzene service: pumps, compressors, pressure relief devices, sampling

connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, and control devices or systems required by this subpart.

2.b [40 CFR 61.110(c)(1)]
If the permittee applies for one of the following exemptions, then records shall be maintained as required in 40 CFR 61.246(i):

i. Any equipment in benzene service that is located at a plant site designed to produce or use less than 1,000 megagrams (1,102 tons) of benzene per year is exempt from the requirements of 40 CFR 61.112.

ii. Any process unit (defined in 40 CFR 61.241) that has no equipment in benzene service is exempt from the requirements of 40 CFR 61.112.

2.c [40 CFR 61.112 Standards]

i. The permittee subject to the provisions of this subpart shall comply with the requirements of 40 CFR Part 61, Subpart V.

ii. The permittee may elect to comply with the requirements of 40 CFR 61.243-1 and 40 CFR 61.243-2.

iii. The permittee may apply to the Administrator for a determination of an alternative means of emission limitation that achieves a reduction in emissions of benzene at least equivalent to the reduction in emissions of benzene achieved by the controls required in this subpart. In doing so, the permittee shall comply with requirements of 40 CFR 61.244.

2.d This emissions unit is exempt from the requirements of OAC rule 3745-21-07(E) pursuant to the requirements of OAC rule 3745-21-07(A)(1). This facility is not located in one of the Priority 1 counties identified in OAC rule 3745-21-06(A).

2.e [40 CFR 61.302(a)]
The permittee shall equip each loading rack with a vapor collection system that is:

i. Designed to collect all benzene vapors displaced from tank trucks and railcars during loading, and

ii. Designed to prevent any benzene vapors collected at one loading rack from passing through another loading rack to the atmosphere.

2.f [40 CFR 61.302(b)]
The permittee shall install a control device and reduce benzene emissions routed to the atmosphere through the control device by 98 weight percent.

2.g [40 CFR 61.302(d)]
The permittee shall limit the loading of benzene into vapor-tight tank trucks and vapor-tight railcars using the following alternative method for each car every time the car is loaded:

i. Connect the loading arms, vent connections, grounding cable, etc. per the loading procedures.

ii. Pressurize each car with nitrogen to 30-35 psig.

iii. While the strings are pressurizing, open all isolation boxes.

iv. When the nitrogen pressure reaches 30-35 psig at the vent end pressure garage of each car, close the nitrogen valve to each car.

v. Using liquid soap, spray each of the following: every flange, interconnecting hose flanges, isolation valves, safety valves, bleed valves, manways (top and bottom), air to open connections, air to close connections, and level probe connections.

vi. Report any and all leaks to the Operating Supervisor and record this finding on the Pressure Test Procedure Form.

vii. Repair all leaks.

viii. If a major repair is needed, such as changing out a safety valve or replacing a valve or hose gasket; after the repair, repressure that particular car and re-soap for leaks.

ix. When all leaks are repaired or if there were no leaks, slowly release the pressure from each car to 10 psig or less to the benzene vent scrubber.

x. Continue with the normal loading procedure.

2.h [40 CFR 61.302(f)]
The permittee shall limit loading of benzene to tank trucks and railcars equipped with vapor collection equipment that is compatible with the affected facility's vapor collection system.

2.i [40 CFR 61.302(g)]
The permittee shall limit loading of tank trucks and railcars to tank trucks and railcars whose collection systems are connected to the affected facility's vapor collection systems.

2.j [40 CFR 61.302(h)]
The permittee shall ensure that the vapor collection and benzene loading equipment of tank trucks and railcars shall be designed and operated to prevent gauge pressure in the tank truck or railcar tank from exceeding, during loading, the initial pressure the tank was pressured up to and shown to be vapor tight at during the most recent vapor-tightness test using Method 27 of Appendix A to 40 CFR Part 60. This vapor-tightness test pressure is not to be exceeded when measured by the procedures specified in 40 CFR 61.304(c).

2.k [40 CFR 61.302(i)]
The permittee shall ensure that no pressure-vacuum vent in the affected facility's vapor collection system for tank trucks and railcars shall begin to open at a system pressure less than the maximum pressure at which the tank truck or railcar is operated.

2.l [40 CFR 61.302(k)]
The permittee shall inspect the vapor collection system and the control device for detectable emissions, and shall repair any leaks detected, in accordance with 40 CFR 61.242-11 (e) and (f). This inspection of the vapor collection system and control device shall be done during the loading of tank trucks or railcars.

2.m [40 CFR 61.302(l)]
Vent systems that contain valves that could divert a vent stream from a control device shall have car-sealed opened all valves in the vent system from the emission source to the control device, and car-sealed closed all valves in the vent system that would lead the vent stream to the atmosphere, either directly or indirectly, bypassing the control device.

II Operational Restrictions

1. The permittee shall use submerged fill whenever this emissions unit is in operation.

2. Pursuant to the U.S. EPA approval letter dated November 12, 1998 for alternate monitoring parameters in accordance with 40 CFR 63.151(g), the following operating parameters shall be met by the permittee:

   a. benzene vent scrubber:

      i. maintain the lean solvent temperature less than 120 degrees Fahrenheit.

      ii. maintain the rich solvent pH greater than 6.5.

iii. maintain the rich solvent percent hydrocarbon less than 10 percent.

b. tetra stripper solvent regenerator:

i. maintain the bottoms temperature greater than 275 degrees Fahrenheit.

3. The permittee shall operate the benzene vent scrubber as the control device for this emissions unit whenever clean tank trucks and/or railcars are being loaded.

4. The permittee shall operate the LIU flare as the control device for this emissions unit whenever tank trucks and/or railcars are being loaded that contain residual volatile material. Terms and conditions for operation of the LIU flare are listed for emissions unit P007.

III Monitoring and/or Recordkeeping

1. The permittee shall include the benzene single railroad car and tank truck loading rack fugitive emissions and associated components in the current site fugitive leak detection and repair (LDAR) program. The LDAR program shall be conducted in accordance with OAC rule 3745-21-09(T); 40 CFR Part 61, Subpart J; and 40 CFR Part 61, Subpart V. Applicable requirements are listed in Part II - Specific Facility Terms and Conditions of this permit.

2. The permittee shall calibrate, maintain, and operate according to manufacturers specifications, device(s) to continuously monitor the temperature of the scrubber absorbing fluid. The device(s) shall be operated such that the benzene vent scrubber lean solvent temperature and tetra stripper solvent regeneration bottoms temperature can be determined.

3. The permittee shall obtain daily samples of the scrubber absorbing fluid and conduct an analysis of the fluid for rich solvent pH and rich solvent percent hydrocarbon.

4. [40 CFR 61.303(e)]
The permittee of an affected facility who wishes to demonstrate compliance with the standards specified under 40 CFR 61.302(b) using control devices other than an incinerator, steam generating unit, process heater, carbon adsorber, or flare shall provide the Administrator with 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.

5. [40 CFR 61.303(f)]
Each permittee of an affected facility complying with 40 CFR 61.302(e)(1) shall install, calibrate, maintain, and operate a recording pressure measurement device (magnehelic gauge or equivalent device) and an audible and visible alarm system that is activated when the pressure vacuum specified in 40 CFR 61.302(e)(1) is not attained. The permittee shall place the alarm system so that it can be seen and heard where cargo transfer is controlled and on the open deck.

6. [40 CFR 61.303(g)]
Permittees using a vent system that contains valves that could divert a vent stream from a control device used to comply with the provisions of this subpart shall do one or a combination of the following:

   a. Install a flow indicator immediately downstream of each valve that if opened would allow a vent stream to bypass the control device and be emitted, either directly or indirectly, to the atmosphere. The flow indicator shall be capable of recording flow at least once every 15 minutes.

   b. Monitor the valves once a month, checking the position of the valves and the condition of the car seal, and identify all times when the car seals have been broken and the valve position has been changed (i.e., from opened to closed for valves in the vent piping to the control device and from closed to open for valves that allow the stream to be vented directly or indirectly to the atmosphere).

7. [40 CFR 61.305(c)]
If a vent system containing valves that could divert the emission stream away from the control device is used, each permittee subject to the provisions of this subpart shall keep for at least 2 years up-to-date, readily accessible continuous records of:

   a. All periods when flow is indicated if flow indicators are installed under 40 CFR 61.303(g)(1).

   b. All times when maintenance is performed on car-sealed valves, when the car seal is broken, and when the valve position is changed (i.e., from open to closed for valves in the vent piping to the control device and from closed to open for valves that vent the stream directly or indirectly to the atmosphere bypassing the control device) if valves are monitored under 40 CFR 60.303(g)(2).

8. [40 CFR 61.305(g)]
The permittee of an affected facility shall keep the vapor-tightness documentation required under 40 CFR 61.302(d) on file at the affected facility in a permanent form available for inspection.

9. [40 CFR 61.305(h)]
The permittee of an affected facility shall update the documentation file required under 40 CFR 61.302(d) for each tank truck or railcar at least once per year to reflect current test results as determined by the appropriate method. The permittee shall include, as a minimum, the following information in this documentation:

   a. test title;

   b. tank truck or railcar owner and address;

c. tank truck or railcar identification number;

d. testing location;

e. date of test;

f. tester name and signature;

g. witnessing inspector: name, signature, and affiliation;

h. test results, including, for railcars and tank trucks, the initial pressure up to which the tank was pressured at the start of the test, and any repairs that were necessary to ensure vapor tightness; and

i. a checklist indicating that each of the procedures outlined in the alternative method has been followed.

IV Reporting Requirements

1. [40 CFR 61.305(f)]
Each permittee of an affected facility subject to the requirements of 40 CFR 61.302 shall submit to the Administrator quarterly reports of the following information. The permittee shall submit the initial report within 90 days after the effective date of this subpart or 90 days after startup for a source that has an initial startup date after the effective date.

a. all periods recorded under 40 CFR 61.305(c)(1) when the vent stream is diverted from the control device;

b. all times recorded under 40 CFR 61.305(c)(2) when maintenance is performed on car-sealed valves, when the car seal is broken, and when the valve position is changed; and

c. all deviations from the operational restrictions in sections A.II.2.a and A.II.2.b of this permit.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

0.51 lb of OC/hr, 2.23 tons of OC/yr

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be based upon the record keeping requirements specified in sections A.III.2 through A.III.9 of this permit. Compliance with the annual emission limitation shall be assumed as long as compliance with the hourly emission limitation is maintained (the annual emission limitation was calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

If required, the permittee shall demonstrate compliance with the hourly allowable OC emission limitation by conducting emission testing in accordance with Methods 1 through 4 and Method 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

1.b [40 CFR 61.304(a)(1)-(4)]
The procedures for determining compliance with 40 CFR 61.302(b) for all control devices other than flares is as follows:

i. All testing equipment shall be prepared and installed as specified in the appropriate test methods.

ii. The time period for a performance test shall be not less than 6 hours, during which at least 300,000 liters of benzene are loaded. If the throughput criterion is not met during the initial 6 hours, the test may be either continued until the throughput criterion is met, or resumed the next day with at least another 6 complete hours of testing.

iii. For intermittent control devices:

(1) The vapor holder level of the intermittent control device shall be recorded at the start of the performance test. The end of the performance test shall coincide with the time when the vapor holder is at its original level.

(2) At least two startups and shutdowns of the control device shall occur during the performance test. If this does not occur under an automatically controlled operation, the system shall be manually controlled.

iv. An emission testing interval shall consist of each 5-minute period during the performance test. For each interval:

(1) The reading from each measurement instrument shall be recorded.

(2) Method 1 or 1A of 40 CFR Part 60, Appendix A, as appropriate, shall be used for selection of the sampling site.

(3) The volume exhausted shall be determined using Method 2, 2A, 2C, or 2D of 40 CFR Part 60, Appendix A, as appropriate.

(4) The average benzene concentration upstream and downstream of the control device in the vent shall be determined using Method 25A or Method 25B of 40 CFR Part 60, Appendix A, using benzene as the calibration gas. The average benzene concentration shall correspond to the volume measurement by taking into account the sampling system response time.

1.c [40 CFR 61.304(a)(5)]
The mass emitted during each testing interval shall be calculated as follows:

Mi = FKVsC

where:

Mi = Mass of benzene emitted during testing interval i, kg;

Vs = Volume of air-vapor mixture exhausted, m3 at standard conditions;

C = Benzene concentration (as measured) at the exhaust vent, ppmv;

K = Density, (kg/m3 benzene), standard conditions;

K = 3.25 for benzene;

F = Conversion factor, (m3 benzene/m3 air)(1/ppmv);

F = 10^-6; and

s = Standard conditions, 20 degrees Celsius and 760 mm Hg.

1.d [40 CFR 61.304(a)(6)]
The benzene mass emission rates before and after the control device shall be calculated as follows:

E = (summation of Mi, i=1,n)/T

where:

E = Mass flow rate of benzene emitted, kg/hr;

Mi = Mass of benzene emitted during testing interval i, kg;

T = Total time of all testing intervals, hr; and

n = Number of testing intervals.

1.e [40 CFR 61.304(a)(7)]
The percent reduction across the control device shall be calculated as follows:

R = [(Eb-Ea)/Eb](100)

where:

R = Control efficiency of control device, %;

Eb = Mass flow rate of benzene prior to control device, kg/hr; and

Ea = Mass flow rate of benzene after control device, kg/hr.

1.f [40 CFR 61.304(c)]
For the purpose of determining compliance with 40 CFR 61.302(h), the following procedures shall be used:

i. Calibrate and install a pressure measurement device (liquid manometer, magnehelic gauge, or equivalent instrument), which has a precision of +/- 2.5 mm water in the range that the tank truck or railcar was initially pressured to during the most recent vapor-tightness test.

ii. Connect the pressure measurement device to a pressure tap in the affected facility's vapor collection system, located as close as possible to the connection with the tank truck or railcar.

iii. During the performance test, record the pressure every 5 minutes while a tank truck or railcar is being loaded, and record the highest instantaneous pressure that occurs during each loading cycle. Every loading rack shall be tested at least once during the performance test.

iv. If more than one loading rack is used simultaneously, then the performance test shall be conducted simultaneously to represent the maximum capacity.

1.g [40 CFR 61.304(e)]
Immediately prior to a performance test required for determination of compliance with 40 CFR 61.302(b), all potential sources of vapor leakage in the affected facility's vapor collection system equipment shall be inspected for detectable emissions as required in 40 CFR 61.302(k). The monitoring shall be conducted only while a vapor-tight tank truck or railcar is being loaded. All

identified leaks in the terminal's vapor collection system shall be repaired prior to conducting the performance test.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Oil/Water Separator System (P025)
Activity Description: Benzene NESHAPs Sewer System

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
benzene NESHAPS sewer system including oil/water separator with thermal oxidizer	OAC rule 3745-31-05(A)(3) (PTI 03-7545)	less than 0.1 lb of benzene/hr
		1.0 lb of volatile organic compounds (VOC)/hr
		1.92 lbs of nitrogen oxides (NOx)/hr
	OAC rule 3745-21-09(M)	See section A.I.2.b.
	40 CFR Part 61, Subpart FF	See section A.I.2.c, A.III, A.IV, and A.V.

2. Additional Terms and Conditions

2.a The permittee currently employs a thermal oxidider as the control equipment; however, the permittee has the option of employing any of the control equipment listed in 40 CFR Part 61, Subpart FF and, as such, would be responsible for any associated monitoring, record keeping, reporting and/or testing requirements. Should a change in control equipment occur, the permittee shall notify the appropriate Ohio EPA District Office or local air agency within 30 days after installation.

2.b 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 lids and seals which are kept in a closed position at all times except when in actual use.

2.c The permittee shall comply with all applicable standards in 40 CFR Part 61, Subpart FF for this emissions unit. Requirements are listed in the following sections of Part II - Specific Facility Terms and Conditions of this permit:

General Standards - Benzene Wastewater [40 CFR 61.342], Section A.38;
Standards: Tanks [40 CFR 61.343], Section A.39.;
Standards: Containers [40 CFR 61.345], Section A.40.;
Standards: Individual Drain Systems [40 CFR 61.346], Section A.41.;
Standards: Oil/Water Separators [40 CFR 61.347], Section A.42.;
Standards: Treatment Processes [40 CFR 61.348], Section A.43.;
Standards: Closed-vent Systems and Control Devices [40 CFR 61.349], Section A.44.;
Standards: Delay of Repair [40 CFR 61.350], Section A.45.;
Alternative Standards for Tanks [40 CFR 61.351], Section A.46.;
Alternative Standards for Oil/Water Separators [40 CFR 61.352], Section A.47.; and
Alternative Means of Emission Limitation [40 CFR 61.353], Section A.48.

2.d DNF Compressors [40 CFR 60.482-1(b)]
Compliance for the DNF compressors 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 60.485.

[40 CFR 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 40 CFR 60.482-1(c), 40 CFR 60.482-3(h) and 40 CFR 60.482-3(i).

[40 CFR 60.482-3(b)]
Each compressor seal system shall be operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or equipped with a barrier fluid system that is connected by a closed vent system to a control device that complies with the requirements of 40 CFR 60.482-10; or equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.

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

2.e [40 CFR 60.482-9] Delay of Repair for Equipment Leaks

[40 CFR 60.482-9(a)]
Delay of repair of equipment for which leaks have been detected will be allowed if the repair is technically infeasible without a process shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.

[40 CFR 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.

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. The permittee shall comply with all applicable monitoring and record keeping requirements in 40 CFR Part 61, Subpart FF for this emissions unit. Requirements are listed in the following sections of Part II - Specific Facility Terms and Conditions of this permit:

   Monitoring of Operations [40 CFR 61.354], Section A.49.; and
   Record Keeping Requirements [40 CFR 61.356], Section A.51.

2. DNF Compressors Monitoring
   [40 CFR 60.482-3(d)]
   Each barrier fluid system shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.

3. [40 CFR 60.482-3(e)]
   Each sensor shall be checked daily or shall be equipped with an audible alarm. The permittee shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, barrier fluid system, or both.

4. [40 CFR 60.482-3(f)]
   If the sensor indicates failure of the seal system or barrier system, or both based on the criterion determined under 40 CFR 60.482-3(e) [see section A.III.3.], a leak is detected.

5. [40 CFR 60.482-3(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 60.482-9 [see section A.I.2.e]. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

6. [40 CFR 60.482-3(i)]
Any compressor that is designated, as described in 40 CFR 60.486(e)(1) and (2) [see section A.III.9.], 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 60.482-3(a)-(h) [see sections A.I.2.d and A.III.2. through A.III.5.] if the compressor:

[40 CFR 60.482-3(i)(1)]
a. 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 40 CFR 60.485(c); and

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

7. DNF Compressor Record Keeping
[40 CFR 60.486(b)]
When each leak is detected as specified in 40 CFR 60.482-3, [see sections A.I.2.d and A.III.2. through A.III.5.], the following requirements apply:

a. A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

b. The identification on equipment, may be removed after it has been repaired.

8. [40 CFR 60.486(c)]
When each leak is detected as specified in 40 CFR 60.482-3, [see sections A.I.2.d and A.III.2. through A.III.5.], the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:

a. the instrument and operator identification numbers and the equipment identification number;

b. the date the leak was detected and the dates of each attempt to repair the leak;

c. repair methods applied in each attempt to repair the leak;

d. "above 10,000" if the maximum instrument reading measured by the methods specified in 40 CFR 60.485(a) after each repair attempt is equal to or greater than 10,000 ppm;

e. "repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak;

f. the signature of the permittee (or designate) whose decision it was that repair could not be effected without a process shutdown;

g. the expected date of successful repair of the leak if a leak is not repaired within 15 days;

h. dates of process unit shutdown that occur while the equipment is unrepaired; and

i. the date of successful repair of the leak.

9. [40 CFR 60.486(e)]
The following information pertaining to the DNF compressors shall be recorded in a log that is kept in a readily accessible location:

a. A list of identification numbers for equipment subject to the compressor requirements of this permit.

b. A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR 60.482-3(i) [see section A.III.6.]. The designation of equipment as subject to 40 CFR 60.482-3(i) [see section A.III.6.] shall be signed by the permittee.

c. The dates of each compliance test as required in 40 CFR 60.482-3(i) [see section A.III.6.].

d. The background level measured during each compliance test.

e. The maximum instrument reading measured at the equipment during each compliance test.

10. [40 CFR 60.486(h)]
The following information shall be recorded in a log that is kept in a readily accessible location:

a. a list of identification numbers for equipment subject to the compressor requirements of this permit;

b. design criterion required in 40 CFR 60.482-3(e)(2) [see section A.III.3.] and explanation of the design criterion; and

c. any changes to this criterion and the reasons for the changes.

11. [40 CFR 60.486(j)]
Information and data used to demonstrate that a compressor is not in VOC service shall be recorded in a log that is kept in a readily accessible location.

IV Reporting Requirements

1. The permittee shall comply with all applicable reporting requirements in 40 CFR Part 61, Subpart FF for this emissions unit. Requirements are listed in the following section of Part II - Specific Facility Terms and Conditions of this permit:

   Reporting Requirements [40 CFR 61.357], Section A.52.

V Testing Requirements

1. [40 CFR 60.485(a)] DNF Compressors
   In conducting the performance tests required in 40 CFR Part 60, Subpart A, the permittee shall use as reference methods and procedures the test methods in 40 CFR Part 60, Appendix A or other methods and procedures as specified in this permit.

2. [40 CFR 60.486(b)]
   The permittee shall determine compliance with the standards in section A.III.7 as follows:

   a. 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. zero air (less than 10 ppm of hydrocarbon in air); and

      ii. a mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm of methane or n-hexane.

3. [40 CFR 60.485(c)]
   The permittee shall determine compliance with the no detectable emission standards in 40 CFR 60.482-3(i) [see section A.III.6.] as follows:

   a. The requirements of 40 CFR 60.486(b) shall apply.

   b. 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.

4. Compliance with the emission limitations specified in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

4.a Emission Limitation:

less than 0.1 lb of benzene/hr

Applicable Compliance Method:

The benzene emission limitation is based on a maximum of 0.1 percent by weight of the total VOC emissions for this emissions unit (from information supplied by the permittee on the constituent fraction of benzene contained in the oil which enters the oil/water separator. If required, the permittee shall determine compliance with the benzene emission limitation by using Methods 1 through 4 and Method 18, 25, or 25A of 40 CFR Part 60, Appendix A, or other approved USEPA methods.

4.b Emission Limitation:

1.0 lb of VOC/hr

Applicable Compliance Method:

Compliance shall be based upon the results of emission testing conducted in accordance with Methods 1 through 4 and Method 18, 25 or 25A of 40 CFR Part 60, Appendix A.

4.c Emission Limitation:

1.92 lbs of NOx/hr

Applicable Compliance Method:

The permittee shall demonstrate compliance with this limitation by multiplying the maximum hourly refinery fuel gas combustion rate for the thermal oxidizer, in million standard cubic feet per hour, by the appropriate NOx emission factor, in pound(s) per million standard cubic feet, from data provided by the equipment manufacturer, and then dividing by the maximum heat input to the thermal oxidizer. If required, the permittee shall demonstrate compliance with this emission limitation by conducting emission testing in accordance with Methods 1 through 4 and Method 7, 7A, 7B, 7C, 7D, or 7E of 40 CFR Part 60, Appendix A.

5. 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 on an annual basis.

b. The emission testing shall be conducted to demonstrate compliance with the emission limitations for the thermal oxidizer as follows:

i. 1.0 lb of VOC/hr; and

ii. minimum destruction efficiency of 99 percent for benzene.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate of 1.0 lb of VOC/hr:

i. Method 18, 25, or 25A 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 method(s) which must be employed to demonstrate compliance with the 99 percent destruction efficiency for benzene are specified below:

i. The destruction efficiency shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

e. 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 appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. 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).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

6. The permittee shall comply with all applicable testing requirements in 40 CFR Part 61, Subpart FF for this emissions unit. Requirements are listed in the following section of Part II - Specific Facility Terms and Conditions of this permit:

   Test Methods, Procedures and Compliance Provisions [40 CFR 61.355], Section A.50.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Process (P027)
Activity Description: Decanted Oil Filter with Knockout Drum

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
decanted oil filter with knockout drum controlled by flare	40 CFR 63.11	See section A.I.2.a.
	OAC rule 3745-31-05(A)(3) (PTI 03-6995)	less than 0.1 lb of volatile organic compounds (VOC)/hr
	OAC rule 3745-21-09(T)	See section A.III.1.

2. Additional Terms and Conditions

2.a This emissions unit is controlled by the FCC flare (emissions unit P006). Thus, the permittee shall comply with all terms and conditions for emissions unit P006.

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. The permittee shall include the decanted oil filter with knockout drum and associated components in the current site fugitive leak detection and repair (LDAR) program. The LDAR program shall be conducted in accordance with OAC rule 3745-21-09(T). Applicable requirements are listed in Part II - Specific Facility Terms and Conditions of this permit.

IV Reporting Requirements

None

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:

1.a Emission Limitation:

less than 0.1 lb of VOC/hr

Applicable Compliance Method:

The permittee may determine compliance with the hourly allowable VOC limitation by multiplying an emission factor of 10.8 lbs of VOC/day* vented to the FCC flare from this emissions unit, dividing by 24 hr/day, and then multiplying by (1 - 95% control efficiency of the FCC flare).

* The emission factor was supplied by the company, and was based on material balance in conjunction with a Pro/II Version 3.12 computer simulation for emissions vented to the FCC flare.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Process (P028)
Activity Description: Oily sludge centrifuge system with thermal oxidizer

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
oily sludge centrifuge system with thermal oxidizer	OAC rule 3745-21-09(T)	See section A.III.1.
	40 CFR Part 60, Subpart GGG and Subpart VV	See sections A.I.2.a through A.I.2.k and A.III.2 through A.III.7.

2. Additional Terms and Conditions

2.a The permittee shall comply with the requirements of 40 CFR 60.482-1 to 60.482-10 as soon as practical, but no later than 180 days after initial startup. [40 CFR 60.592(a)]

2.b The permittee may elect to comply with the requirements of 40 CFR 60.483-1 and 60.483-2. [40 CFR 60.592(b)]

2.c The permittee may apply to the Administrator of the U.S. EPA for a determination of equivalency 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 this subpart. In doing so, the permittee shall comply with requirements of 40 CFR 60.484. [40 CFR 60.592(c)]

2.d The permittee shall comply with the provisions of 40 CFR 60.485 except as provided in 40 CFR 60.593. [40 CFR 60.592(d)]

2.e The permittee shall comply with the provisions of 40 CFR 60.486 and 60.487. [40 CFR 60.592(e)]

2.f 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 40 CFR 60.482-1(c) and paragraph (h) and (i) of 40 CFR 60.482-3. [40 CFR 60.482-3(a)]

2.g Each compressor seal system shall be operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or 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 60.482-10; or equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere. [40 CFR 60.482-3(b)(1)-(3)]

2.h The barrier fluid system shall be in heavy liquid service or shall not be in VOC service. [40 CFR 60.482-3(c)]

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

2.j A compressor is exempt from the requirements of 40 CFR 60.482-3(a) and 40 CFR 60.482-3(b) if it is equipped with a closed vent system to capture and transport leakage from the compressor drive shaft back to a process or fuel gas system or to a control device that complies with the requirements of 40 CFR 60.482-10, except as provided in 40 CFR 60.482-3(i). [40 CFR 60.482-3(h)]

2.k Any existing reciprocating compressor in a process unit which becomes an affected facility under provisions of 40 CFR 60.14 or 40 CFR 60.15 is exempt from 40 CFR 60.482(a), (b), (c), (d), (e) and (h), 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 40 CFR 60.482(a), (b), (c), (d), (e) and (h). [40 CFR 60.482-3(j)]

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. The permittee shall include the oily sludge centrifuge system process fugitive emissions and associated components in the current site fugitive leak detection and repair (LDAR) program. The LDAR program shall be conducted in accordance with OAC rule 3745-21-09(T); 40 CFR

Part 60, Subpart GGG; and 40 CFR Part 60, Subpart VV. Applicable requirements are listed in Part II - Specific Facility Terms and Conditions of this permit.

2. Each sensor shall be checked daily or shall be equipped with an audible alarm. [40 CFR 60.482-3(e)(1)]

3. 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. [40 CFR 60.482-3(e)(2)]

4. 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. [40 CFR 60.482-3(f)]

5. 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 60.482-9. [40 CFR 60.482-3(g)(1)]

6. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-3(g)(2)]

7. Any compressor that is designated, as described in 40 CFR 60.486(e)(1) and (2), 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 60.482-3(a) through (h) if the compressor:

   a. is demonstrated to be operating with no detectable emissions, as indicated an instrument reading of less than 500 ppm above background, as measured by the methods specified in 40 CFR 60.485(c); and

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

8. This emissions unit is controlled by the thermal oxidizer which is also used to control emissions from emissions unit P025. Therefore, the permittee shall comply with all applicable monitoring and record keeping requirements for the thermal oxidizer listed for emissions unit P025.

IV Reporting Requirements

1. The permittee shall submit LDAR reports in accordance with the LDAR reporting requirements for OAC rule 3745-21-09(T) and 40 CFR 60.487, listed in Part II - Specific Facility Terms and Conditions of this permit.

2. The permittee shall comply with all applicable reporting requirements for the thermal oxidizer listed for emissions unit P025.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Trolumen Compressor (P029)
Activity Description: Trolumen Gas Compressor

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
trolumen gas compressor	OAC rule 3745-31-05(A)(3) (PTI 03-10450)	1.40 lbs of fugitive organic compounds (OC)/hr and 6.13 tons of fugitive OC/yr 0.59 lb of fugitive volatile organic compounds (VOC)/hr and 2.58 tons of fugitive VOC/yr (See section A.I.2.a.)
	OAC rule 3745-21-09(T)	See section A.III.1.
	40 CFR Part 60, Subpart GGG and Subpart VV	See sections A.I.2.b through A.I.2.l and A.III.2 through A.III.7.

2. Additional Terms and Conditions

2.a VOC emissions comprise 41.8 percent, by weight, of the total OC emissions.

2.b The permittee shall comply with the requirements of 40 CFR 60.482-1 to 60.482-10 as soon as practical, but no later than 180 days after initial startup. [40 CFR 60.592(a)]

2.c The permittee may elect to comply with the requirements of 40 CFR 60.483-1 and 60.483-2. [40 CFR 60.592(b)]

2.d The permittee may apply to the Administrator of the U.S. EPA for a determination of equivalency 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 this subpart. In doing so, the permittee shall comply with requirements of 40 CFR 60.484. [40 CFR 60.592(c)]

2.e The permittee shall comply with the provisions of 40 CFR 60.485 except as provided in 40 CFR 60.593. [40 CFR 60.592(d)]

2.f The permittee shall comply with the provisions of 40 CFR 60.486 and 60.487. [40 CFR 60.592(e)]

2.g The 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 40 CFR 60.482-1(c) and paragraph (h) and (i) of 40 CFR 60.482-3. [40 CFR 60.482-3(a)]

2.h The compressor seal system shall be operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or 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 60.482-10; or equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere. [40 CFR 60.482-3(b)(1)-(3)]

2.i The barrier fluid system shall be in heavy liquid service or shall not be in VOC service. [40 CFR 60.482-3(c)]

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

2.k A compressor is exempt from the requirements of 40 CFR 60.482-3(a) and 40 CFR 60.482-3(b) if it is equipped with a closed vent system to capture and transport leakage from the compressor drive shaft back to a process or fuel gas system or to a control device that complies with the requirements of 40 CFR 60.482-10, except as provided in 40 CFR 60.482-3(i). [40 CFR 60.482-3(h)]

2.l Any existing reciprocating compressor in a process unit which becomes an affected facility under provisions of 40 CFR 60.14 or 40 CFR 60.15 is exempt from 40 CFR 60.482(a), (b), (c), (d), (e) and (h), 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 40 CFR 60.482(a), (b), (c), (d), (e) and (h). [40 CFR 60.482-3(j)]

2.m The 1.40 lb of fugitive OC/hr and 6.13 tons of fugitive OC/yr emission limitations were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.

2.n The 0.59 lb of fugitive VOC/hr and 2.58 tons of fugitive VOC/yr emission limitations were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. The permittee shall include the trolumen gas compressor seal and associated components in the current site fugitive leak detection and repair (LDAR) program. The LDAR program shall be conducted in accordance with OAC rule 3745-21-09(T); 40 CFR Part 60, Subpart GGG; and 40 CFR Part 60, Subpart VV. Applicable requirements are listed in Part II - Specific Facility Terms and Conditions of this permit.

2. Each sensor shall be checked daily or shall be equipped with an audible alarm. [40 CFR 60.482-3(e)(1)]

3. 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. [40 CFR 60.482-3(e)(2)]

4. 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. [40 CFR 60.482-3(f)]

5. 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 60.482-9. [40 CFR 60.482-3(g)(1)]

6. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 60.482-3(g)(2)]

7. Any compressor that is designated, as described in 40 CFR 60.486(e)(1) and (2), 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 60.482-3(a) through (h) if the compressor:

a. is demonstrated to be operating with no detectable emissions, as indicated an instrument reading of less than 500 ppm above background, as measured by the methods specified in 40 CFR 60.485(c); and

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

IV Reporting Requirements

1. The permittee shall submit LDAR reports in accordance with the LDAR reporting requirements for OAC rule 3745-21-09(T) and 40 CFR 60.487, listed in Part II - Specific Facility Terms and Conditions of this permit.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

1.40 lbs of fugitive OC/hr and 6.13 tons of fugitive OC/yr

Applicable Compliance Method:

The permittee may determine compliance with the hourly allowable OC emission limitation by multiplying an emission factor of 0.636 kg of OC/hr/compressor * by 2.2 lb/kg and by 1 compressor.

* emission factor supplied by the permittee, based on EPA-453/R-95-017, "1995 Protocol for Equipment Leak Emission Estimates", U.S. EPA, November 1995

Compliance with the annual emission limitation shall be assumed as long as compliance with the hourly emission limitation is maintained (the annual emission limitation was calculated by multiplying the hourly emission limitation by 8760 hrs/yr, and then dividing by 2000 lbs/ton).

1.b Emission Limitation:

0.59 lb of fugitive VOC/hr and 2.58 tons of fugitive VOC/yr

Applicable Compliance Method:

The permittee may determine compliance with the hourly allowable VOC emission limitation by multiplying an emission factor of 0.636 kg of OC/hr/compressor * by 41.8 percent, by weight, of the total OC by 2.2 lb/kg and by 1 compressor.

* emission factor supplied by the permittee, based on EPA-453/R-95-017, "1995 Protocol for Equipment Leak Emission Estimates", U.S. EPA, November 1995

Compliance with the annual emission limitation shall be assumed as long as compliance with the hourly emission limitation is maintained (the annual emission limitation was calculated by multiplying the hourly emission limitation by 8760 hrs/yr, and then dividing by 2000 lbs/ton).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Process (P030)
Activity Description: Reformer

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
catalytic reformer, controlled by LIU flare	40 CFR 63.11	See section A.I.2.a.

2. Additional Terms and Conditions

2.a This emissions unit is controlled by the LIU flare (emissions unit P007). Thus, the permittee shall comply with all terms and conditions for emissions unit P007. There are no additional requirements.

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Process (P031)
Activity Description: Knock Motors - Laboratory

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
4 horsepower, gasoline fired stationary small internal combustion engine (knock motors, laboratory)	OAC rule 3745-17-11(B)(5)(a)	0.310 pound of particulate emissions (PE) per million Btu of actual heat input for a stationary small internal combustion engine
	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-18-06	exempt See section A.I.2.a.

2. Additional Terms and Conditions

2.a This emissions unit is exempt from the requirements of this rule because the rated heat input capacity of this emissions unit is less than 10 mmBtu/hr total rated capacity.

II Operational Restrictions

1. The permittee shall burn only gasoline in this emissions unit.

III Monitoring and/or Recordkeeping

1. 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

1. 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 emission limitations specified in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

0.310 pound of PE per million Btu of actual heat input

Applicable Compliance Method:

The permittee may determine compliance with the limitation above based on an emission factor from AP-42, Table 3.3-1. (revised 10/96) of 0.10 lb of PE (condensible)/mmBtu of actual heat input.

If required, the permittee shall demonstrate compliance with the limitation above in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A.

1.b Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible particulate emission limitation above in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and the requirements specified in OAC rule 3745-17-03(B)(1).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Process (P032)
Activity Description: Knock Motors - Plant

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
4 horsepower, gasoline fired stationary small internal combustion engine (knock motors, plant)	OAC rule 3745-17-11(B)(5)(a)	0.310 pound of particulate emissions (PE) per million Btu of actual heat input for a stationary small internal combustion engine
	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-18-06	exempt See section A.I.2.a.

2. Additional Terms and Conditions

2.a This emissions unit is exempt from the requirements of this rule because the rated heat input capacity of this emissions unit is less than 10 mmBtu/hr total rated capacity.

II Operational Restrictions

1. The permittee shall burn only gasoline in this emissions unit.

III Monitoring and/or Recordkeeping

1. 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

1. 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 emission limitations specified in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

0.310 pound of PE per million Btu of actual heat input

Applicable Compliance Method:

The permittee may determine compliance with the limitation above based on an emission factor from AP-42, Table 3.3-1. (revised 10/96) of 0.10 lb of PE (condensible)/mmBtu of actual heat input.

If required, the permittee shall demonstrate compliance with the limitation above in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A.

1.b Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible particulate emission limitation above in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and the requirements specified in OAC rule 3745-17-03(B)(1).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: SRU Cooling Tower (P033)
Activity Description: SRU Cooling Tower

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
sulfur recovery unit cooling tower	OAC rule 3745-17-11(B)	5.24 lbs/hr of particulate emissions See section A.I.2.a.
	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

2. Additional Terms and Conditions

2.a The total dissolved solids (TDS) present in cooling water drift is directly responsible for the formation of particulate emissions when the drift is discharged from a cooling tower. The process weight rate (PWR) used to determine the allowable particulate mass emission rate is the total tons of TDS processed per hour through the cooling tower. Based on the maximum TDS concentration for optimum cooling tower operation of 1600 ppm and the cooling water maximum process flow rate of 3,600 gallons per minute, a PWR of 1.442 tons of TDS per hour was calculated. Using Table 1 in OAC rule 3745-17-11(B), the allowable particulate mass emission rate was determined to be 5.24 lbs/hr.

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. The permittee shall test and record the TDS content, in ppm, of the cooling water at least once per week. The TDS content shall be measured using method 2540 C, "Total Dissolved Solids Dried at 180 Degrees C" from the most recent edition of "Standard Methods for the Examination of Water and Wastewater" or an equivalent method approved by the Ohio EPA, Northwest District Office.

2. The permittee shall calculate and record the particulate emissions, in pounds per hour. The particulate emissions shall be calculated as follows:

   [(3,600 gallons/minute) x (ppm TDS) x (0.0002) x (60 min/hr) x (0.0584)] / (7000 grains/lb) = particulate emissions, in lbs/hr

   where:

   3,600 gallons/minute = the maximum water flow rate;
   ppm TDS = the TDS level;
   0.0002 = the maximum drift loss factor;
   60 min/hr = conversion factor for minutes to hours;
   0.0584 = conversion factor for ppm to grains/gallon; and
   7000 gr/lb = conversion factor for grains to pounds.

IV Reporting Requirements

1. The permittee shall submit deviation reports in accordance with the general terms and conditions of this permit that identify any exceedances of the allowable mass emission limitation.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

5.24 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated by the monitoring and record keeping requirements specified in sections A.III.1 and A.III.2 of these terms and conditions. If required, the permittee shall conduct drift measurement testing to determine the drift factor for this cooling tower utilizing the "Isokinetic Drift Measurement Test Code for Water Cooling Towers", ATC-140(94), June, 1994 (or the most recent edition) from the Cooling Technology Institute.

1.b Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, the permittee shall conduct visible particulate emission observations in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 9.

VI Miscellaneous Requirements

1. The permittee installed this emissions unit in June, 1974 without first applying for and obtaining a permit to install (PTI), in violation of OAC rule 3745-31-02. As the initial step to allow this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete PTI application within 2 months after issuance of this permit.

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: BH Cooling Tower (P034)
Activity Description: Boiler House Cooling Tower

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
boiler house cooling tower	OAC rule 3745-17-11(B)	5.49 lbs/hr of particulate emissions See section A.I.2.a.
	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

2. Additional Terms and Conditions

2.a The total dissolved solids (TDS) present in cooling water drift is directly responsible for the formation of particulate emissions when the drift is discharged from a cooling tower. The process weight rate (PWR) used to determine the allowable particulate mass emission rate is the total tons of TDS processed per hour through the cooling tower. Based on the maximum TDS concentration for optimum cooling tower operation of 1600 ppm and the cooling water maximum process flow rate of 3,860 gallons per minute, a PWR of 1.546 tons of TDS per hour was calculated. Using Table 1 in OAC rule 3745-17-11(B), the allowable particulate mass emission rate was determined to be 5.49 lbs/hr.

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. The permittee shall test and record the TDS content, in ppm, of the cooling water at least once per week. The TDS content shall be measured using method 2540 C, "Total Dissolved Solids Dried at 180 Degrees C" from the most recent edition of "Standard Methods for the Examination of Water and Wastewater" or an equivalent method approved by the Ohio EPA, Northwest District Office.

2. The permittee shall calculate and record the particulate emissions, in pounds per hour. The particulate emissions shall be calculated as follows:

   [(3,860 gallons/minute) x (ppm TDS) x (0.0002) x (60 min/hr) x (0.0584)] / (7000 grains/lb) = particulate emissions, in lbs/hr

   where:

   3,860 gallons/minute = the maximum water flow rate;
   ppm TDS = the TDS level;
   0.0002 = the maximum drift loss factor;
   60 min/hr = conversion factor for minutes to hours;
   0.0584 = conversion factor for ppm to grains/gallon; and
   7000 gr/lb = conversion factor for grains to pounds.

IV Reporting Requirements

1. The permittee shall submit deviation reports in accordance with the general terms and conditions of this permit that identify any exceedances of the allowable mass emission limitation.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

5.49 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated by the monitoring and record keeping requirements specified in sections A.III.1 and A.III.2 of these terms and conditions. If required, the permittee shall conduct drift measurement testing to determine the drift factor for this cooling tower utilizing the "Isokinetic Drift Measurement Test Code for Water Cooling Towers", ATC-140(94), June, 1994 (or the most recent edition) from the Cooling Technology Institute.

1.b Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, the permittee shall conduct visible particulate emission observations in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 9.

VI Miscellaneous Requirements

1. The permittee installed this emissions unit in June, 1980 without first applying for and obtaining a permit to install (PTI), in violation of OAC rule 3745-31-02. As the initial step to allow this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete PTI application within 2 months after issuance of this permit.

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Acid Gas Flare (P036)
Activity Description: Acid Gas Flare

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
acid gas flare, non-assisted	40 CFR 63.11(b)(4)	no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours
	40 CFR 63.11(b)(2) through 40 CFR 63.11(b)(3), and 40 CFR 63.11(b)(5) through 40 CFR 63.11(b)(7)	See sections A.II.1 through A.II.9.

2. Additional Terms and Conditions

2.a None

II Operational Restrictions

1. The flare shall be operated at all times when emissions may be vented to it.

2. The flare shall be operated with a pilot flame present at all times.

3. The permittee has the choice of adhering to the heat content specifications in 40 CFR 63.11(b)(6)(ii), and the maximum tip velocity specifications in 40 CFR 63.11(b)(7) or 40 CFR 63.11(b)(8), or adhering to the requirements in 40 CFR 63.11(b)(6)(i).

4. [40 CFR 63.11(b)(6)(i)(A)]
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 Vmax, as determined by the following equation:

Vmax = (XH2 minus K1) * K2

where:

Vmax = Maximum permitted velocity, m/sec;

K1 = Constant, 6.0 volume-percent hydrogen;

K2 = Constant, 3.9 (m/sec)/volume-percent hydrogen; and

XH2 = 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).

5. [40 CFR 63.11(b)(6)(i)(B)]
The actual exit velocity of a flare shall be determined by the method specified in 40 CFR 63.11(b)(7)(i).

6. [40 CFR 63.11(b)(6)(ii)]
The flare shall be used only with the net heating value of the gas being combusted at 7.45 MJ/scm (200 Btu/scf) or greater (for non-assisted flare). The net heating value of the gas being combusted in the flare shall be calculated using the following equation:

HT = K*(summation of i=1,n)*Ci*Hi

where:

HT = Net heating value of the sample, in MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25 degrees Celsius and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 degrees Celsius;

K = Constant = 1.740 x 10^-7(1/ppmv)(g-mole/scm)(MJ/kcal)

where:

the standard temperature for (g-mole/scm) is 20 degrees Celsius;

Ci = Concentration of sample component i in ppmv on a wet basis, as measured for organics by Test Method 18 and measured for hydrogen and carbon monoxide by American Society for Testing and Materials (ASTM) D1946-77 or 90 (Reapproved 1994) (incorporated by reference as specified in 40 CFR 63.14);

Hi = Net heat of combustion of sample component i, kcal/g-mole at 25 degrees Celsius and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95 (incorporated by reference as specified in 40 CFR 63.14) if published values are not available or cannot be calculated; and

n = Number of sample components.

7. [40 CFR 63.11(b)(7)(i)]
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 40 CFR 63.11(b)(7)(ii) and 40 CFR 63.11(b)(7)(iii). The actual exit velocity of the flare shall be determined by dividing the volumetric flow rate of gas being combusted (in units of emission standard temperature and pressure), as determined by Test Method 2, 2A, 2C, or 2D in Appendix A to 40 CFR Part 60 of this chapter, as appropriate, by the unobstructed (free) cross-sectional area of the flare tip.

8. [40 CFR 63.11(b)(7)(ii)]
Nonassisted flares designed for and operated with an exit velocity, as determined by the method specified in 40 CFR 63.11(b)(7)(i), 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).

9. [40 CFR 63.11(b)(7)(iii)]
Nonassisted flares designed for and operated with an exit velocity, as determined by the method specified in 40 CFR 63.11(b)(7)(i), less than the velocity Vmax, as determined by the method specified in this paragraph, but less than 122 m/sec (400 ft/sec) are allowed. The maximum permitted velocity, Vmax, for flares complying with this paragraph shall be determined by the following equation:

$$\text{Log10}(V_{max}) = (HT+28.8)/31.7$$

where:

Vmax = Maximum permitted velocity, m/sec;

28.8 = constant;

31.7 = constant; and

HT = The net heating value as determined in paragraph (b)(6) of this section.

III Monitoring and/or Recordkeeping

1. The permittee shall operate and maintain 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 flare pilot flame. All monitoring equipment shall be calibrated, maintained, and operated according to manufacturer's specifications.

2. The permittee shall record the following information each day:

   a. all periods during which the flare was not operating and emissions were vented to it;

   b. all periods during which there was no pilot flame;

   c. the operating times for the flare and the continuous monitoring for flame presence; and

   d. all periods during which there were visible emissions from the flare, except for periods not to exceed a total of 5 minutes in any consecutive 2-hour period.

3. The permittee shall keep up-to-date records of the following information:

   a. flare design (i.e., steam-assisted, air-assisted, or non-assisted); and

   b. all visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations made during any compliance determinations.

4. [40 CFR 63.654(i)(3)]

4.a Each permittee required to continuously monitor operating parameters under 40 CFR 63.644 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 (i)(3)(i) through (i)(3)(v) of 40 CFR 63.644 unless an alternative recordkeeping system has been requested and approved under paragraph (h) of 40 CFR 63.644.

   i. The monitoring system shall measure data values at least once every hour.

   ii. The permittee shall record either:

      (1) Each measured data value; or

(2) 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. Daily average values of each continuously monitored parameter shall be calculated for each operating day and retained for 5 years except as specified in paragraph (i)(3)(iv) of 40 CFR 63.644.

(1) 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.

(2) 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. 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 paragraph (i)(3)(ii) of 40 CFR 63.644 shall also be retained for 5 years.

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 this subpart. 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.

4.b All other information required to be reported under paragraphs (a) through (h) of 40 CFR 63.654 shall be retained for 5 years.

5. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the flare serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall record visible emissions, using Method 22, for at least 10 consecutive minutes and shall also note the following in the operations log:

a. the color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and
e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods during which the flare pilot flame was not functioning properly or the flare had visible emissions exceeding a total of 5 minutes in any consecutive 2-hour period. The reports shall include the date, time, and duration of each such period, as well as reasons for each such deviation.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the flare serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

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:

1.a Emission Limitation:

no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours

Applicable Compliance Method:

Compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 22. The observation period is 2 hours and shall be used according to Method 22. A compliance determination for visible emissions shall be conducted within 90 days of the issuance of this permit.

2. The permittee shall conduct, or have conducted, testing for this emissions unit in accordance with the following requirements:

a. The testing shall be conducted approximately 2.5 years after permit issuance and within 6 months prior to permit expiration.

b. The testing shall be conducted to determine the net heating value of the gas being combusted in the flare and the actual exit velocity of the flare in accordance with the operational restrictions and equations specified in sections A.II.6 and A.II.8 for net heating value, and sections A.II.4, A.II.7, A.II.8, and A.II.9 for actual exit velocity.

c. The following test method(s) shall be employed to determine the actual exit velocity of the flare:

Method 2, 2A, 2C or 2D 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 appropriate Ohio EPA District Office or local air agency.

2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. 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).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: LIU Cooling Tower (P037)
Activity Description: LIU Cooling Tower

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
LIU cooling tower	OAC rule 3745-17-11(B)	43.95 lbs/hr of particulate emissions See section A.I.2.a.
	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

2. Additional Terms and Conditions

2.a The total dissolved solids (TDS) present in cooling water drift is directly responsible for the formation of particulate emissions when the drift is discharged from a cooling tower. The process weight rate (PWR) used to determine the allowable particulate mass emission rate is the total tons of TDS processed per hour through the cooling tower. Based on the maximum TDS concentration for optimum cooling tower operation of 2800 ppm and the cooling water maximum process flow rate of 66,675 gallons per minute, a PWR of 46.7378 tons of TDS per hour was calculated. Using Table 1 in OAC rule 3745-17-11(B), the allowable particulate mass emission rate was determined to be 43.95 lbs/hr.

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. The permittee shall test and record the TDS content, in ppm, of the cooling water at least once per week. The TDS content shall be measured using method 2540 C, "Total Dissolved Solids Dried at 180 Degrees C" from the most recent edition of "Standard Methods for the Examination of Water and Wastewater" or an equivalent method approved by the Ohio EPA, Northwest District Office.

2. The permittee shall calculate and record the particulate emissions, in pounds per hour. The particulate emissions shall be calculated as follows:

   [(66,675 gallons/minute) x (ppm TDS) x (0.0002) x (60 min/hr) x (0.0584)] / (7000 grains/lb) = particulate emissions, in lbs/hr

   where:

   66,675 gallons/minute = the maximum water flow rate;
   ppm TDS = the TDS level;
   0.0002 = the maximum drift loss factor;
   60 min/hr = conversion factor for minutes to hours;
   0.0584 = conversion factor for ppm to grains/gallon; and
   7000 gr/lb = conversion factor for grains to pounds.

IV Reporting Requirements

1. The permittee shall submit deviation reports in accordance with the general terms and conditions of this permit that identify any exceedances of the allowable mass emission limitation.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

43.95 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated by the monitoring and record keeping requirements specified in sections A.III.1 and A.III.2 of these terms and conditions. If required, the permittee shall conduct drift measurement testing to determine the drift factor for this cooling tower utilizing the "Isokinetic Drift Measurement Test Code for Water Cooling Towers", ATC-140(94), June, 1994 (or the most recent edition) from the Cooling Technology Institute.

1.b Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, the permittee shall conduct visible particulate emission observations in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 9.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: FCC Cooling Tower (P038)
Activity Description: FCC Cooling Tower

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
FCC cooling tower	OAC rule 3745-17-11(B)	23.40 lbs/hr of particulate emissions See section A.I.2.a.
	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

2. Additional Terms and Conditions

2.a The total dissolved solids (TDS) present in cooling water drift is directly responsible for the formation of particulate emissions when the drift is discharged from a cooling tower. The process weight rate (PWR) used to determine the allowable particulate mass emission rate is the total tons of TDS processed per hour through the cooling tower. Based on the maximum TDS concentration for optimum cooling tower operation of 2400 ppm and the cooling water maximum process flow rate of 22,400 gallons per minute, a PWR of 13.4555 tons of TDS per hour was calculated. Using Table 1 in OAC rule 3745-17-11(B), the allowable particulate mass emission rate was determined to be 23.40 lbs/hr.

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. The permittee shall test and record the TDS content, in ppm, of the cooling water at least once per week. The TDS content shall be measured using method 2540 C, "Total Dissolved Solids Dried at 180 Degrees C" from the most recent edition of "Standard Methods for the Examination of Water and Wastewater" or an equivalent method approved by the Ohio EPA, Northwest District Office.

2. The permittee shall calculate and record the particulate emissions, in pounds per hour. The particulate emissions shall be calculated as follows:

   [(22,400 gallons/minute) x (ppm TDS) x (0.0002) x (60 min/hr) x (0.0584)] / (7000 grains/lb) = particulate emissions, in lbs/hr

   where:

   22,400 gallons/minute = the maximum water flow rate;
   ppm TDS = the TDS level;
   0.0002 = the maximum drift loss factor;
   60 min/hr = conversion factor for minutes to hours;
   0.0584 = conversion factor for ppm to grains/gallon; and
   7000 gr/lb = conversion factor for grains to pounds.

IV Reporting Requirements

1. The permittee shall submit deviation reports in accordance with the general terms and conditions of this permit that identify any exceedances of the allowable mass emission limitation.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

23.40 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated by the monitoring and record keeping requirements specified in sections A.III.1 and A.III.2 of these terms and conditions. If required, the permittee shall conduct drift measurement testing to determine the drift factor for this cooling tower utilizing the "Isokinetic Drift Measurement Test Code for Water Cooling Towers", ATC-140(94), June, 1994 (or the most recent edition) from the Cooling Technology Institute.

1.b Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, the permittee shall conduct visible particulate emission observations in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 9.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Sewers (P801)
Activity Description: Central, North, South Refinery Sewers

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
central, north, and south refinery sewers	none	none

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100216 (T009)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof storage tank with an internal floating roof and a capacity of 79,800 gallons	OAC rule 3745-21-09 (L)	see A.I.2.b and A.I.2.c
	40 CFR Part 60, Subpart Ka	see A.I.2.d and A.I.2.e
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.6
	40 CFR 63.646	see A.II.1 through A.II.3, and shall comply with 40 CFR 63.119 through 63.121 (see A.I.2.g through A.I.2.k and A.III.7 through A.III.13)

2. **Additional Terms and Conditions**

2.a The storage tank was installed in 1956 and modified on September 1, 1982, and stores slop oil with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

2.b The fixed roof storage tank shall be equipped with an internal floating roof.

2.c 40 CFR 63 Subpart CC regulations overlap with those of OAC rule 3745-21-09(L).

2.d The permittee of each storage vessel which contains a petroleum liquid which, as stored, has a true vapor pressure equal to or greater than 10.3 kPa (1.5 psia) but not greater than 76.6 kPa (11.1 psia) shall equip the storage vessel with the following:

A fixed roof with an internal floating type cover equipped with a continuous closure device between the tank wall and the cover edge. The cover is to be floating at all times, (i.e., off the leg supports) except during initial fill and when the tank is completely emptied and subsequently refilled. The process of emptying and refilling when the cover is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. Each opening in the cover except for automatic bleeder vents and the rim space vents is to provide a projection below the liquid surface. Each opening in the cover except for automatic bleeder vents, rim space vents, stub drains and leg sleeves is to be equipped with a cover, seal, or lid which 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 cover is floating except when the cover is being floated off or is being landed on the leg supports. Rim vents are to be set to open only when the cover is being floated off the leg supports or at the manufacturer's recommended setting.

2.e If an existing storage vessel had an internal floating roof with a continuous seal as of July 28, 1988, the requirements listed below do not have to be met until the first time after September 14, 1989, the vessel is emptied and degassed or September 14, 1999, whichever occurs first,

i. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted.

ii. Each penetration of the internal floating roof for the purposes of sampling shall be a sample well. Each sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

iii. Each automatic bleeder vent shall be gasketed.

iv. Rim space vents shall be equipped with a gasket.

v. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

vi. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

2.f Each cover or lid on any opening in the internal floating roof shall be closed (i.e., no visible gaps), except when a device is in actual use. Covers on each access hatch and each automatic gauge float well which are equipped with bolts shall be bolted when they are not in use. Rim space vents are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

2.g 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 in the following:

i. During the initial fill.

ii. After the vessel has been completely emptied and degassed.

iii. When the vessel is completely emptied before being subsequently refilled.

2.h 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.

2.i 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 A.I.2.j, the closure device shall consist of one of the devices listed in the following:

i. A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel or waste management unit and the floating roof. The seal is mounted continuously around the circumference of the vessel or unit.

ii. A metallic shoe seal or mechanical shoe seal means metal sheets that are held vertically against the wall of the storage vessel by springs, weighted levers, or other mechanisms and connected to the floating roof by braces or other means. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

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.

2.j If the internal floating roof is equipped with a vapor-mounted seal as of December 31, 1992, the requirement for one of the seal options specified in A.I.2.i does not apply until the earlier of the dates specified in the following:

i. The next time the storage vessel is emptied and degassed.

ii. No later than 10 years after April 22, 1994.

2.k 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.l In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement executed by the United States Environmental Protection Agency (USEPA) on February 2, 2001, the permittee installed a pole sleeve system on the slotted guidepole of this emissions unit on December 21, 2001.

The pole sleeve system shall meet the following requirements:

i. Each opening through the deck of the floating roof for a slotted guidepole shall be equipped with a deck cover, a pole wiper and a pole sleeve.

ii. The deck cover shall be equipped with a gasket between the cover and the deck.

iii. The sleeve shall extend into the stored liquid.

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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.

Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

ii. For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(1) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(2) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(1) May be obtained from standard reference texts, or

(2) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or

(3) Measured by an appropriate method approved by the Administrator; or

(4) Calculated by an appropriate method approved by the Administrator.

2. Except as provided in A.III.5, the permittee shall maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period.

3. Available data on the typical Reid vapor pressure and the maximum expected storage temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517, unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

4. The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa (2.0 psia) or whose physical properties preclude determination by the recommended method is to be determined from available data and recorded if the estimated true vapor pressure is greater than 6.9 kPa (1.0 psia).

5. The following are exempt from the requirements of A.III.2 through A.III.4: each permittee of each storage vessel storing a petroleum liquid with a Reid vapor pressure of less than 6.9 kPa (1.0 psia) provided the maximum true vapor pressure does not exceed 6.9 kPa (1.0 psia).

6. Each 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.

7. 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 A.III.8 and A.III.9.

8. For vessels equipped with a single-seal system, the permittee shall perform the inspections specified in the following:

   a. 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 (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first).

   b. Visually inspect the internal floating roof, the seal, gaskets, slotted membranes, and sleeve seals (if any) each time the storage vessel is emptied and degassed, and at least once every 10 years after the compliance date (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first).

9. For vessels equipped with a double-seal system as specified in A.I.2.i.iii, the permittee shall perform either the inspection required in A.III.9.a or the inspections required in A.III.9.b and A.III.9.c.

   a. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time the storage

vessel is emptied and degassed and at least once every 5 years after the compliance date (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first); or

b. 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 (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first), and

c. Visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time the vessel is emptied and degassed and at least once every 10 years after the compliance date (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first).

10. If during the inspections required by A.III.8.a or A.III.8.b, 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 A.III.8.a or A.III.8.b 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.

11. Except as provided in A.III.12, for all the inspections required by A.III.8.b, A.III.9.a, and A.III.9.c, the permittee shall notify the Administrator in writing at least 30 calendar days prior to the refilling of each storage vessel to afford the Administrator the opportunity to have an observer present.

12. If the inspection required by A.III.8.b, A.III.9.a, and A.III.9.c is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel, the permittee shall notify the Administrator at least 7 calendar days prior to the refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, the notification including the written documentation may be made in writing and sent so that it is received by the Administrator at least 7 calendar days prior to refilling.

13. If during the inspections required by A.III.8.b, A.III.9.a, and A.III.9.c, 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; 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 refilling the storage vessel with organic HAP.

14. In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement, the permittee shall meet the following:

    a. The sliding cover shall be in place over the slotted-guidepole opening through the floating roof at all times except when the sliding cover must be removed for access.

    b. If the control technology used includes a guidepole float, the float shall be floating within the guidepole at all times except when it must be removed for access to the stored liquid or when the tank is empty.

    c. Visually inspect the deck fitting for the slotted guidepole at least once every 10 years and each time the vessel is emptied and degassed.

    d. If the slotted guidepole deck fitting or control devices have defects, or if a gap of more than 0.32 centimeters (1/8 inch) exists between any gasket required for control of the slotted guidepole deck fitting and any surface that it is intended to seal, such items shall be repaired before filling or refilling the storage vessel with regulated material.

    e. Tanks taken out of hydrocarbon service, for any reason, do not have to have any controls in place during the time they are out of service.

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100085 (T010)
Activity Description: Storage of Organic Liquids

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
above ground storage tank with an internal floating roof and a capacity of 88,128 gallons	OAC rule 3745-21-09(L)	see A.I.2.a through A.I.2.d and A.III.1
	40 CFR 60 Subpart Kb:	
	40 CFR 60.112b	see A.I.2.e through A.I.2.m
	40 CFR 60.113b	see A.III.2 through A.III.5 and A.IV.1
	40 CFR 60.115b	see A.III.6, A.III.7, and A.IV.2 through A.IV.4
	40 CFR 60.116b	see A.III.8 through A.III.10, and A.IV.5
	40 CFR 61 Subpart FF	Control requirements, monitoring and/or record keeping requirements, and reporting requirements are satisfied by the requirements in 40 CFR 60 Subpart Kb

40 CFR 63 Subpart CC:

40 CFR 63.640(n)(1)	Overlap of subpart CC with other regulations for storage vessels - if subject to the provisions of 40 CFR subpart Kb, required to comply only with the requirements of 40 CFR subpart Kb

2. Additional Terms and Conditions

2.a The maximum true vapor pressure of organic liquid stored in this storage tank shall not exceed 11.1 psia.

2.b The fixed roof storage tank shall be equipped with an internal floating roof.

2.c 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.d All openings, except stub drains, shall be equipped with a cover, seal or lid, which is in the closed position at all times, except when in actual use for tank gauging or sampling.

2.e The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

2.f Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

i. A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.

ii. 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.

iii. A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

2.g Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

2.h Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

2.i Automatic bleeder vents shall be equipped with a gasket and 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.j Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

2.k Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

2.l Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

2.m Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

2.n The storage tank was installed in 1951 and modified on June 1, 1992, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or

equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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.

Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

ii. For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(1) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(2) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(1) May be obtained from standard reference texts, or

(2) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or

(3) Measured by an appropriate method approved by the Administrator; or

(4) Calculated by an appropriate method approved by the Administrator.

2. Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the permittee shall repair the items before filling the storage vessel.

3. For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in A.IV.3. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

4. For vessels equipped with a double-seal system as specified in A.I.2.f.ii.:

4.a Visually inspect the vessel as specified in A.III.5. at least every 5 years; or

4.b Visually inspect the vessel as specified in A.III.3.

5. Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal 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 surfaces 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 refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels

conducting the annual visual inspection as specified in A.III.3 and A.III.4.b and at intervals no greater than 5 years in the case of vessels specified in A.III.4.a.

6. The permittee shall keep copies of all reports and records required in A.IV.2, A.IV.3, and A.IV.4, for at least 2 years.

7. Keep a record of each inspection performed as required by A.III.2, A.III.3, A.III.4, and A.III.5. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

8. The permittee shall keep copies of all records required by A.III.2 through A.III.10, excluding A.III.9, for at least 2 years.

9. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel (shall be kept for the life of the source).

10. The permittee of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements.

10.a Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in A.III.1.b.

10.b For vessels in which the vapor pressure of the anticipated liquid composition is above 76.6 kPa (11.1 psia), an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:

i. ASTM Method D2879-83 (incorporated by reference--see 40 CFR. 60.17); or

ii. ASTM Method D323-82 (incorporated by reference--see 40 CFR 60.17); or

iii. As measured by an appropriate method as approved by the Administrator.

IV Reporting Requirements

1. Notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by A.III.2 and A.III.5 to afford the Administrator the opportunity to have an observer present. If the inspection required by A.III.5 is not planned and the permittee could not have known about the inspection 30 days in advance or 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. Alternatively, 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.

2. Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of A.I.2.e through A.I.2.m and A.III.2. This report shall be an attachment to the notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

3. If any of the conditions described in A.III.3 are detected during the annual visual inspection required by A.III.3, a report shall be furnished to the Administrator within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

4. After each inspection required by A.III.4 that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in A.III.4.b, a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of A.I.2.e through A.I.2.m or A.III.4 and list each repair made.

5. The permittee of each storage vessel either with a design capacity greater than or equal to 151 cubic meters storing a liquid with a maximum true vapor pressure that is normally less than 5.2 kPa (0.75 psia) or with a design capacity greater than or equal to 75 cubic meters but less than 151 cubic meters storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa (4.0 psia) shall notify the Administrator within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100084 (T011)
Activity Description: Storage of Organic Liquids

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
above ground storage tank with an internal floating roof with capacity of 88,128 gallons	OAC rule 3745-21-09 (L)	see A.I.2.a through A.I.2.d and A.III.1
	40 CFR 60 Subpart Kb:	
	40 CFR 60.112b	see A.I.2.e through A.I.2.m
	40 CFR 60.113b	see A.III.2 through A.III.5 and A.IV.1
	40 CFR 60.115b	see A.III.6, A.III.7, and A.IV.2 through A.IV.4
	40 CFR 60.116b	see A.III.8 through A.III.10, and A.IV.5
	40 CFR 61 Subpart FF	Control requirements, monitoring and/or record keeping requirements, and reporting requirements are satisfied by the requirements in 40 CFR 60 Subpart Kb

40 CFR 63 Subpart CC:

40 CFR 63.640(n)(1)	Overlap of subpart CC with other regulations for storage vessels - if subject to the provisions of 40 CFR subpart Kb, required to comply only with the requirements of 40 CFR subpart Kb

2. Additional Terms and Conditions

2.a The maximum true vapor pressure of organic liquid stored in this storage tank shall not exceed 11.1 psia.

2.b The fixed roof storage tank shall be equipped with an internal floating roof.

2.c 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.d All openings, except stub drains, shall be equipped with a cover, seal or lid, which is in the closed position at all times, except when in actual use for tank gauging or sampling.

2.e The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

2.f Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

i. A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.

ii. 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.

iii. A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

2.g Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

2.h Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

2.i Automatic bleeder vents shall be equipped with a gasket and 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.j Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

2.k Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

2.l Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

2.m Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

2.n The storage tank was installed in 1951 and modified on June 1, 1992, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or

equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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.

Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

ii. For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(1) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(2) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(1) May be obtained from standard reference texts, or

(2) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or

(3) Measured by an appropriate method approved by the Administrator; or

(4) Calculated by an appropriate method approved by the Administrator.

2. Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the permittee shall repair the items before filling the storage vessel.

3. For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in A.IV.3. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

4. For vessels equipped with a double-seal system as specified in A.I.2.f.ii.:

4.a Visually inspect the vessel as specified in A.III.5. at least every 5 years; or

4.b Visually inspect the vessel as specified in A.III.3.

5. Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal 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 surfaces 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 refilling the storage vessel with VOL. In no event shall inspections conducted in

accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in A.III.3 and A.III.4.b and at intervals no greater than 5 years in the case of vessels specified in A.III.4.a.

6. The permittee shall keep copies of all reports and records required in A.IV.2, A.IV.3, and A.IV.4, for at least 2 years.

7. Keep a record of each inspection performed as required by A.III.2, A.III.3, A.III.4, and A.III.5. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

8. The permittee shall keep copies of all records required by A.III.2 through A.III.10, excluding A.III.9, for at least 2 years.

9. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel (shall be kept for the life of the source).

10. The permittee of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements.

10.a Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in A.III.1.b.

10.b For vessels in which the vapor pressure of the anticipated liquid composition is above 76.6 kPa (11.1 psia), an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:

i. ASTM Method D2879-83 (incorporated by reference--see 40 CFR. 60.17); or

ii. ASTM Method D323-82 (incorporated by reference--see 40 CFR 60.17); or

iii. As measured by an appropriate method as approved by the Administrator.

IV Reporting Requirements

1. Notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by A.III.2 and A.III.5 to afford the Administrator the opportunity to have an observer present. If the inspection required by A.III.5 is not planned and the permittee could not have known about the inspection 30 days in advance or 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. Alternatively, 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.

2. Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of A.I.2.e through A.I.2.m and A.III.2. This report shall be an attachment to the notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

3. If any of the conditions described in A.III.3 are detected during the annual visual inspection required by A.III.3, a report shall be furnished to the Administrator within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

4. After each inspection required by A.III.4 that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in A.III.4.b, a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of A.I.2.e through A.I.2.m or A.III.4 and list each repair made.

5. The permittee of each storage vessel either with a design capacity greater than or equal to 151 cubic meters storing a liquid with a maximum true vapor pressure that is normally less than 5.2 kPa (0.75 psia) or with a design capacity greater than or equal to 75 cubic meters but less than 151 cubic meters storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa (4.0 psia) shall notify the Administrator within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100096 (T017)
Activity Description: Storage of Organic Liquids

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
above ground external floating roof storage tank with a capacity of 1,381,844 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)	OAC rule 3745-21-09 (Z)	see A.I.2.a-g, A.III.1-4, and A.IV.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e) and (f)	see A.III.5.
	40 CFR 63.646	see A.II.1-3

2. Additional Terms and Conditions

2.a Any welded external floating roof storage tank equipped with a liquid-mounted primary seal and rim-mounted secondary seal, a mechanical shoe primary seal and a rim-mounted secondary seal, a mechanical shoe primary seal and a shoe-mounted, secondary seal, and the shoe-mounted secondary seal was installed prior to 1/10/81, a vapor-mounted primary seal and a rim-mounted secondary seal, and the vapor-mounted primary seal was installed prior to 1/01/81, or a flexible wiper primary seal and a rim-mounted secondary seal, and the flexible wiper primary seal was installed prior to 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 10.0 square inches 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 appropriate Ohio EPA District Office or local air agency 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:

i. A cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use.

ii. A projection into the tank below the liquid surface.

2.c Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

2.d Any rim vent shall be set to open at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports.

2.e 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.f Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.g 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.h The storage tank was installed in 1950 with no modifications, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

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.

   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. Each 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 Director (the appropriate Ohio EPA District Office or local air agency) 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.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100134 (T018)
Activity Description: Storage of Organic Liquids

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
above-ground, external floating roof storage tank with a capacity of 846,027 gallons (welded shell construction with mechanical shoe primary seal)	OAC rule 3745-21-09(Z)(3)(c)	exempt, see A.I.2.a and A.II.1
	40 CFR Part 63, Subpart CC	see A.I.2.b

2. Additional Terms and Conditions

2.a This emissions unit is exempt from the requirements of OAC rule 3745-21-09(Z)(1) and 3745-21-09(Z)(2) as long as the permittee does not store any petroleum liquid with a maximum true vapor pressure greater than or equal to 1.5 pounds per square inch absolute.

2.b Based on the operational restriction in A.II.1, this emissions unit is a Group 2 storage vessel, as defined in 40 CFR 63.641 [i.e., storage vessel at an existing source with a stored-liquid maximum true vapor pressure less than 10.4 kPa (1.51 psia)]; therefore, it is exempt from the requirements of Subpart CC.

2.c The storage tank was installed in 1957 with no modifications, and stores organic liquids with a maximum true vapor pressure of 1.49 psia.

II Operational Restrictions

1. The permittee shall not place, store, or hold in this external floating roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than or equal to 1.5 pounds per square inch absolute.

III Monitoring and/or Recordkeeping

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 pound per square inch absolute.

IV Reporting Requirements

1. If the permittee places, stores, or holds in the external floating roof tank any petroleum liquid with a true vapor pressure which is greater than 1.5 pounds per square inch absolute, and such tank does not comply with the requirements of OAC rule 3745-21-09(Z)(1), the permittee shall so notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100135 (T019)
Activity Description: Storage of Organic Liquids

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
above ground external floating roof storage tank with a capacity of 846,027 gallons (welded shell construction with mechanical shoe primary seal)	OAC rule 3745-21-09(Z)(3)(c)	exempt, see A.I.2.a and A.II.1
	40 CFR Part 63, Subpart CC	see A.I.2.b

2. Additional Terms and Conditions

2.a This emissions unit is exempt from the requirements of OAC rule 3745-21-09(Z)(1) and 3745-21-09(Z)(2) as long as the permittee does not store any petroleum liquid with a maximum true vapor pressure greater than or equal to 1.5 pounds per square inch absolute.

2.b Based on the operational restriction in A.II.1, this emissions unit is a Group 2 storage vessel, as defined in 40 CFR 63.641 [i.e., storage vessel at an existing source with a stored-liquid maximum true vapor pressure less than 10.4 kPa (1.51 psia)]; therefore, it is exempt from the requirements of Subpart CC.

2.c The storage tank was installed in 1957 with no modifications, and stores organic liquids with a maximum true vapor pressure of 1.49 psia.

II Operational Restrictions

1. The permittee shall not place, store, or hold in this external floating roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than or equal to 1.5 pounds per square inch absolute.

III Monitoring and/or Recordkeeping

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 pound per square inch absolute.

IV Reporting Requirements

1. If the permittee places, stores, or holds in the external floating roof tank any petroleum liquid with a true vapor pressure which is greater than 1.5 pounds per square inch absolute, and such tank does not comply with the requirements of OAC rule 3745-21-09(Z)(1), the permittee shall so notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100201 (T020)
Activity Description: Storage of Organic Liquids

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
above ground external floating roof storage tank with a capacity of 2,284,273 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)	OAC rule 3745-21-09 (Z)	see A.I.2.a-g, A.III.1-4, and A.IV.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e) and (f)	see A.III.5.
	40 CFR 63.646	see A.II.1-3

2. Additional Terms and Conditions

2.a Any welded external floating roof storage tank equipped with a liquid-mounted primary seal and rim-mounted secondary seal, a mechanical shoe primary seal and a rim-mounted secondary seal, a mechanical shoe primary seal and a shoe-mounted, secondary seal, and the shoe-mounted secondary seal was installed prior to 1/10/81, a vapor-mounted primary seal and a rim-mounted secondary seal, and the vapor-mounted primary seal was installed prior to 1/01/81, or a flexible wiper primary seal and a rim-mounted secondary seal, and the flexible wiper primary seal was installed prior to 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 10.0 square inches 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 appropriate Ohio EPA District Office or local air agency 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:

i. A cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use.

ii. A projection into the tank below the liquid surface.

2.c Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

2.d Any rim vent shall be set to open at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports.

2.e 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.f Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.g 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.h The storage tank was installed in 1953 with no modifications, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

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.

   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. Each 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 Director (the appropriate Ohio EPA District Office or local air agency) 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.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100202 (T021)
Activity Description: Storage of Organic Liquids

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
above ground external floating roof storage tank with a capacity of 2,284,273 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)	OAC rule 3745-21-09 (Z)	see A.I.2.a-g, A.III.1-4, and A.IV.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e) and (f)	see A.III.5.
	40 CFR 63.646	see A.II.1-3

2. Additional Terms and Conditions

2.a Any welded external floating roof storage tank equipped with a liquid-mounted primary seal and rim-mounted secondary seal, a mechanical shoe primary seal and a rim-mounted secondary seal, a mechanical shoe primary seal and a shoe-mounted, secondary seal, and the shoe-mounted secondary seal was installed prior to 1/10/81, a vapor-mounted primary seal and a rim-mounted secondary seal, and the vapor-mounted primary seal was installed prior to 1/01/81, or a flexible wiper primary seal and a rim-mounted secondary seal, and the flexible wiper primary seal was installed prior to 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 10.0 square inches 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 appropriate Ohio EPA District Office or local air agency 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:

i. A cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use.

ii. A projection into the tank below the liquid surface.

2.c Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

2.d Any rim vent shall be set to open at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports.

2.e 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.f Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.g 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.h The storage tank was installed in 1949 with no modifications, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

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.

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. Each 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 Director (the appropriate Ohio EPA District Office or local air agency) 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.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100203 (T022)
Activity Description: Storage of Organic Liquids

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
above ground external floating roof storage tank with a capacity of 2,284,273 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)	OAC rule 3745-21-09 (Z)	see A.I.2.a-g, A.III.1-4, and A.IV.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e) and (f)	see A.III.5.
	40 CFR 63.646	see A.II.1-3

2. Additional Terms and Conditions

2.a Any welded external floating roof storage tank equipped with a liquid-mounted primary seal and rim-mounted secondary seal, a mechanical shoe primary seal and a rim-mounted secondary seal, a mechanical shoe primary seal and a shoe-mounted, secondary seal, and the shoe-mounted secondary seal was installed prior to 1/10/81, a vapor-mounted primary seal and a rim-mounted secondary seal, and the vapor-mounted primary seal was installed prior to 1/01/81, or a flexible wiper primary seal and a rim-mounted secondary seal, and the flexible wiper primary seal was installed prior to 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 10.0 square inches 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 appropriate Ohio EPA District Office or local air agency 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:

i. A cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use.

ii. A projection into the tank below the liquid surface.

2.c Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

2.d Any rim vent shall be set to open at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports.

2.e 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.f Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.g 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.h The storage tank was installed in 1949 with no modifications, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

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.

   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. Each 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 Director (the appropriate Ohio EPA District Office or local air agency) 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.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100204 (T023)
Activity Description: Storage of Organic Liquids

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
above ground external floating roof storage tank with a capacity of 424,482 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)	OAC rule 3745-21-09 (Z)	see A.I.2.a-g, A.III.1-4, and A.IV.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e) and (f)	see A.III.5.
	40 CFR 63.646	see A.II.1-3

2. Additional Terms and Conditions

2.a Any welded external floating roof storage tank equipped with a liquid-mounted primary seal and rim-mounted secondary seal, a mechanical shoe primary seal and a rim-mounted secondary seal, a mechanical shoe primary seal and a shoe-mounted, secondary seal, and the shoe-mounted secondary seal was installed prior to 1/10/81, a vapor-mounted primary seal and a rim-mounted secondary seal, and the vapor-mounted primary seal was installed prior to 1/01/81, or a flexible wiper primary seal and a rim-mounted secondary seal, and the flexible wiper primary seal was installed prior to 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 10.0 square inches 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 appropriate Ohio EPA District Office or local air agency 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:

i. A cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use.

ii. A projection into the tank below the liquid surface.

2.c Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

2.d Any rim vent shall be set to open at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports.

2.e 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.f Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.g 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.h The storage tank was installed in 1940 with no modifications, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

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.

   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. Each 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 Director (the appropriate Ohio EPA District Office or local air agency) 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.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100205 (T024)
Activity Description: Storage of Organic Liquids

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
above ground external floating roof storage tank with a capacity of 484,703 gallons (riveted or bolted shell construction, mechanical shoe primary seal, metal plate wiper secondary seal)	OAC rule 3745-21-09 (Z)	see A.I.2.a-g, A.III.1-4, and A.IV.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e) and (f)	see A.III.5.
	40 CFR 63.646	see A.II.1-3

2. Additional Terms and Conditions

2.a Any welded external floating roof storage tank equipped with a liquid-mounted primary seal and rim-mounted secondary seal, a mechanical shoe primary seal and a rim-mounted secondary seal, a mechanical shoe primary seal and a shoe-mounted, secondary seal, and the shoe-mounted secondary seal was installed prior to 1/10/81, a vapor-mounted primary seal and a rim-mounted secondary seal, and the vapor-mounted primary seal was installed prior to 1/01/81, or a flexible wiper primary seal and a rim-mounted secondary seal, and the flexible wiper primary seal was installed prior to 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 10.0 square inches 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 appropriate Ohio EPA District Office or local air agency 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:

i. A cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use.

ii. A projection into the tank below the liquid surface.

2.c Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

2.d Any rim vent shall be set to open at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports.

2.e 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.f Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.g 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.h The storage tank was installed in 1928 with no modifications, and stores an organic liquid with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

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.

   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. Each 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 Director (the appropriate Ohio EPA District Office or local air agency) 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.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100206 (T025)
Activity Description: Storage of Organic Liquids

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
above ground external floating roof storage tank with a capacity of 2,284,273 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)	OAC rule 3745-21-09 (Z)	see A.I.2.a-g, A.III.1-4, and A.IV.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e) and (f)	see A.III.5.
	40 CFR 63.646	see A.II.1-3

2. Additional Terms and Conditions

2.a Any welded external floating roof storage tank equipped with a liquid-mounted primary seal and rim-mounted secondary seal, a mechanical shoe primary seal and a rim-mounted secondary seal, a mechanical shoe primary seal and a shoe-mounted, secondary seal, and the shoe-mounted secondary seal was installed prior to 1/10/81, a vapor-mounted primary seal and a rim-mounted secondary seal, and the vapor-mounted primary seal was installed prior to 1/01/81, or a flexible wiper primary seal and a rim-mounted secondary seal, and the flexible wiper primary seal was installed prior to 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 10.0 square inches 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 appropriate Ohio EPA District Office or local air agency 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:

i. A cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use.

ii. A projection into the tank below the liquid surface.

2.c Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

2.d Any rim vent shall be set to open at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports.

2.e 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.f Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.g 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.h The storage tank was installed in 1949 with no modifications, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

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.

   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. Each 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 Director (the appropriate Ohio EPA District Office or local air agency) 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.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100207 (T026)
Activity Description: Storage of Organic Liquids

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
above ground external floating roof storage tank with a capacity of 2,284,273 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)	OAC rule 3745-21-09 (Z)	see A.I.2.a-g, A.III.1-4, and A.IV.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e) and (f)	see A.III.5.
	40 CFR 63.646	see A.II.1-3

2. Additional Terms and Conditions

2.a Any welded external floating roof storage tank equipped with a liquid-mounted primary seal and rim-mounted secondary seal, a mechanical shoe primary seal and a rim-mounted secondary seal, a mechanical shoe primary seal and a shoe-mounted, secondary seal, and the shoe-mounted secondary seal was installed prior to 1/10/81, a vapor-mounted primary seal and a rim-mounted secondary seal, and the vapor-mounted primary seal was installed prior to 1/01/81, or a flexible wiper primary seal and a rim-mounted secondary seal, and the flexible wiper primary seal was installed prior to 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 10.0 square inches 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 appropriate Ohio EPA District Office or local air agency 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:

i. A cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use.

ii. A projection into the tank below the liquid surface.

2.c Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

2.d Any rim vent shall be set to open at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports.

2.e 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.f Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.g 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.h In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement executed by the United States Environmental Protection Agency (USEPA) on February 2, 2001, the permittee installed a pole sleeve system on the slotted guidepole of this emissions unit on December 21, 2001.

The pole sleeve system shall meet the following requirements:

i Each opening through the deck of the floating roof for a slotted guidepole shall be equipped with a deck cover, a pole wiper and a pole sleeve.

ii. The deck cover shall be equipped with a gasket between the cover and the deck.

iii. The sleeve shall extend into the stored liquid.

2.i The storage tank was installed in 1949 with no modifications, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

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.

   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. Each 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.

6. In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement, the permittee shall meet the following:

   a. The sliding cover shall be in place over the slotted-guidepole opening through the floating roof at all times except when the sliding cover must be removed for access.

   b. If the control technology used includes a guidepole float, the float shall be floating within the guidepole at all times except when it must be removed for access to the stored liquid or when the tank is empty.

   c. Visually inspect the deck fitting for the slotted guidepole at least once every 10 years and each time the vessel is emptied and degassed.

   d. If the slotted guidepole deck fitting or control devices have defects, or if a gap of more than 0.32 centimeters (1/8 inch) exists between any gasket required for control of the slotted guidepole deck fitting and any surface that it is intended to seal, such items shall be repaired before filling or refilling the storage vessel with regulated material.

   e. Tanks taken out of hydrocarbon service, for any reason, do not have to have any controls in place during the time they are out of service.

IV Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) 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.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100208 (T027)
Activity Description: Storage of Organic Liquids

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
above ground external floating roof storage tank with a capacity of 2,284,273 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)	OAC rule 3745-21-09 (Z)	see A.I.2.a-g, A.III.1-4, and A.IV.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e) and (f)	see A.III.5.
	40 CFR 63.646	see A.II.1-3

2. Additional Terms and Conditions

2.a. Any welded external floating roof storage tank equipped with a liquid-mounted primary seal and rim-mounted secondary seal, a mechanical shoe primary seal and a rim-mounted secondary seal, a mechanical shoe primary seal and a shoe-mounted, secondary seal, and the shoe-mounted secondary seal was installed prior to 1/10/81, a vapor-mounted primary seal and a rim-mounted secondary seal, and the vapor-mounted primary seal was installed prior to 1/01/81, or a flexible wiper primary seal and a rim-mounted secondary seal, and the flexible wiper primary seal was installed prior to 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 10.0 square inches 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 appropriate Ohio EPA District Office or local air agency 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:

i. A cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use.

ii. A projection into the tank below the liquid surface.

2.c Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

2.d Any rim vent shall be set to open at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports.

2.e 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.f Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.g 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.h In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement executed by the United States Environmental Protection Agency (USEPA) on February 2, 2001, the permittee installed a pole sleeve system on the slotted guidepole of this emissions unit on December 21, 2001.

The pole sleeve system shall meet the following requirements:

i. Each opening through the deck of the floating roof for a slotted guidepole shall be equipped with a deck cover, a pole wiper and a pole sleeve.

ii. The deck cover shall be equipped with a gasket between the cover and the deck.

iii. The sleeve shall extend into the stored liquid.

2.i The storage tank was installed in 1953 with no modifications, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

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.

   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. Each 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.

6. In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement, the permittee shall meet the following:

   a. The sliding cover shall be in place over the slotted-guidepole opening through the floating roof at all times except when the sliding cover must be removed for access.

   b. If the control technology used includes a guidepole float, the float shall be floating within the guidepole at all times except when it must be removed for access to the stored liquid or when the tank is empty.

   c. Visually inspect the deck fitting for the slotted guidepole at least once every 10 years and each time the vessel is emptied and degassed.

   d. If the slotted guidepole deck fitting or control devices have defects, or if a gap of more than 0.32 centimeters (1/8 inch) exists between any gasket required for control of the slotted guidepole deck fitting and any surface that it is intended to seal, such items shall be repaired before filling or refilling the storage vessel with regulated material.

   e. Tanks taken out of hydrocarbon service, for any reason, do not have to have any controls in place during the time they are out of service.

IV Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) 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.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100209 (T028)
Activity Description: Storage of Organic Liquids

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
above ground external floating roof storage tank with a capacity of 2,284,273 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)	OAC rule 3745-21-09 (Z)	see A.I.2.a-g, A.III.1-4, and A.IV.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e) and (f)	see A.III.5.
	40 CFR 63.646	see A.II.1-3

2. Additional Terms and Conditions

2.a Any welded external floating roof storage tank equipped with a liquid-mounted primary seal and rim-mounted secondary seal, a mechanical shoe primary seal and a rim-mounted secondary seal, a mechanical shoe primary seal and a shoe-mounted, secondary seal, and the shoe-mounted secondary seal was installed prior to 1/10/81, a vapor-mounted primary seal and a rim-mounted secondary seal, and the vapor-mounted primary seal was installed prior to 1/01/81, or a flexible wiper primary seal and a rim-mounted secondary seal, and the flexible wiper primary seal was installed prior to 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 10.0 square inches 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 appropriate Ohio EPA District Office or local air agency 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:

i. A cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use.

ii. A projection into the tank below the liquid surface.

2.c Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

2.d. Any rim vent shall be set to open at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports.

2.e 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.f Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.g 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.h The storage tank was installed in 1954 with no modifications, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

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.

   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. Each 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 Director (the appropriate Ohio EPA District Office or local air agency) 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.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100210 (T029)
Activity Description: Storage of Organic Liquids

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
above ground external floating roof storage tank with a capacity of 4,060,929 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)	OAC rule 3745-21-09 (Z)	see A.I.2.a-g, A.III.1-4, and A.IV.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e) and (f)	see A.III.5.
	40 CFR 63.646	see A.II.1-3

2. Additional Terms and Conditions

2.a Any welded external floating roof storage tank equipped with a liquid-mounted primary seal and rim-mounted secondary seal, a mechanical shoe primary seal and a rim-mounted secondary seal, a mechanical shoe primary seal and a shoe-mounted, secondary seal, and the shoe-mounted secondary seal was installed prior to 1/10/81, a vapor-mounted primary seal and a rim-mounted secondary seal, and the vapor-mounted primary seal was installed prior to 1/01/81, or a flexible wiper primary seal and a rim-mounted secondary seal, and the flexible wiper primary seal was installed prior to 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 10.0 square inches 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 appropriate Ohio EPA District Office or local air agency 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:

i. A cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use.

ii. A projection into the tank below the liquid surface.

2.c Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

2.d Any rim vent shall be set to open at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports.

2.e 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.f Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.g 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.h The storage tank was installed in 1954 with no modifications, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

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.

   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. Each 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 Director (the appropriate Ohio EPA District Office or local air agency) 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.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100212 (T030)
Activity Description: Storage of Organic Liquids

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
above ground external floating roof storage tank with a capacity of 4,060,929 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)	OAC rule 3745-21-09 (Z)	see A.I.2.a-g, A.III.1-4, and A.IV.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e) and (f)	see A.III.5.
	40 CFR 63.646	see A.II.1-3

2. Additional Terms and Conditions

2.a Any welded external floating roof storage tank equipped with a liquid-mounted primary seal and rim-mounted secondary seal, a mechanical shoe primary seal and a rim-mounted secondary seal, a mechanical shoe primary seal and a shoe-mounted, secondary seal, and the shoe-mounted secondary seal was installed prior to 1/10/81, a vapor-mounted primary seal and a rim-mounted secondary seal, and the vapor-mounted primary seal was installed prior to 1/01/81, or a flexible wiper primary seal and a rim-mounted secondary seal, and the flexible wiper primary seal was installed prior to 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 10.0 square inches 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 appropriate Ohio EPA District Office or local air agency 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:

i. A cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use.

ii. A projection into the tank below the liquid surface.

2.c Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

2.d Any rim vent shall be set to open at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports.

2.e 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.f Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.g 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.h In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement executed by the United States Environmental Protection Agency (USEPA) on February 2, 2001, the permittee installed a pole sleeve system on the slotted guidepole of this emissions unit on December 21, 2001.

The pole sleeve system shall meet the following requirements:

i. Each opening through the deck of the floating roof for a slotted guidepole shall be equipped with a deck cover, a pole wiper and a pole sleeve.

ii. The deck cover shall be equipped with a gasket between the cover and the deck.

iii. The sleeve shall extend into the stored liquid.

2.i The storage tank was installed in 1950 with no modifications, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

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.

   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. Each 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.

6. In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement, the permittee shall meet the following:

   a. The sliding cover shall be in place over the slotted-guidepole opening through the floating roof at all times except when the sliding cover must be removed for access.

   b. If the control technology used includes a guidepole float, the float shall be floating within the guidepole at all times except when it must be removed for access to the stored liquid or when the tank is empty.

   c. Visually inspect the deck fitting for the slotted guidepole at least once every 10 years and each time the vessel is emptied and degassed.

   d. If the slotted guidepole deck fitting or control devices have defects, or if a gap of more than 0.32 centimeters (1/8 inch) exists between any gasket required for control of the slotted guidepole deck fitting and any surface that it is intended to seal, such items shall be repaired before filling or refilling the storage vessel with regulated material.

   e. Tanks taken out of hydrocarbon service, for any reason, do not have to have any controls in place during the time they are out of service.

IV Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) 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.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100213 (T031)
Activity Description: Storage of Organic Liquids

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
above ground internal floating roof tank (3,412,308 gallons)	OAC rule 3745-21-09 (L)	see A.I.2.a through A.I.2.d and A.III.1
	40 CFR 60 Subpart Kb:	
	40 CFR 60.112b	see A.I.2.e through A.I.2.m
	40 CFR 60.113b	see A.III.2 through A.III.5 and A.IV.1
	40 CFR 60.115b	see A.III.6, A.III.7, and A.IV.2 through A.IV.4
	40 CFR 60.116b	see A.III.8 through A.III.10, and A.IV.5
	40 CFR 63 Subpart CC:	
	40 CFR 63.640(n)(1)	Overlap of subpart CC with other regulations for storage vessels - if subject to the provisions of 40 CFR subpart Kb, required to comply only

with the requirements of 40 CFR subpart Kb

2. Additional Terms and Conditions

2.a The maximum true vapor pressure of organic liquid stored in this storage tank shall not exceed 11.1 psia.

2.b The fixed roof storage tank shall be equipped with an internal floating roof.

2.c 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.d All openings, except stub drains, shall be equipped with a cover, seal or lid, which is in the closed position at all times, except when in actual use for tank gauging or sampling.

2.e The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

2.f Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

i. A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.

ii. 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.

iii. A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

2.g Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

2.h Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

2.i Automatic bleeder vents shall be equipped with a gasket and 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.j Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

2.k Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

2.l Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

2.m Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

2.n The storage tank was installed in 1949 and modified on November 1, 1995, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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.

Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

ii. For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(1) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(2) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(1) May be obtained from standard reference texts, or

(2) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or

(3) Measured by an appropriate method approved by the Administrator; or

(4) Calculated by an appropriate method approved by the Administrator.

2. Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the permittee shall repair the items before filling the storage vessel.

3. For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in A.IV.3. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

4. For vessels equipped with a double-seal system as specified in A.I.2.f.ii.:

4.a Visually inspect the vessel as specified in A.III.5. at least every 5 years; or

4.b Visually inspect the vessel as specified in A.III.3.

5. Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal 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 surfaces 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 refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in A.III.3 and A.III.4.b and at intervals no greater than 5 years in the case of vessels specified in A.III.4.a.

6. The permittee shall keep copies of all reports and records required in A.IV.2, A.IV.3, and A.IV.4, for at least 2 years.

7. Keep a record of each inspection performed as required by A.III.2, A.III.3, A.III.4, and A.III.5. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

8. The permittee shall keep copies of all records required by A.III.2 through A.III.10, excluding A.III.9, for at least 2 years.

9. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel (shall be kept for the life of the source).

10. The permittee of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements.

10.a Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in A.III.1.b.

10.b For vessels in which the vapor pressure of the anticipated liquid composition is above 76.6 kPa (11.1 psia), an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:

i. ASTM Method D2879-83 (incorporated by reference--see 40 CFR. 60.17); or

ii. ASTM Method D323-82 (incorporated by reference--see 40 CFR 60.17); or

iii. As measured by an appropriate method as approved by the Administrator.

IV Reporting Requirements

1. Notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by A.III.2 and A.III.5 to afford the Administrator the opportunity to have an observer present. If the inspection required by A.III.5 is not planned and the permittee could not have known about the inspection 30 days in advance or 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. Alternatively, 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.

2. Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of A.I.2.e through A.I.2.m and A.III.2. This report shall be an attachment to the notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

3. If any of the conditions described in A.III.3 are detected during the annual visual inspection required by A.III.3, a report shall be furnished to the Administrator within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

4. After each inspection required by A.III.4 that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in A.III.4.b, a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of A.I.2.e through A.I.2.m or A.III.4 and list each repair made.

5. The permittee of each storage vessel either with a design capacity greater than or equal to 151 cubic meters storing a liquid with a maximum true vapor pressure that is normally less than 5.2 kPa (0.75 psia) or with a design capacity greater than or equal to 75 cubic meters but less than 151 cubic meters storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa (4.0 psia) shall notify the Administrator within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100214 (T032)
Activity Description: Storage of Organic Liquids

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
above ground internal floating roof tank (3,412,308 gallons)	OAC rule 3745-21-09 (L)	see A.I.2.a through A.I.2.d and A.III.1
	40 CFR 60 Subpart Kb:	
	40 CFR 60.112b	see A.I.2.e through A.I.2.m
	40 CFR 60.113b	see A.III.2 through A.III.5 and A.IV.1
	40 CFR 60.115b	see A.III.6, A.III.7, and A.IV.2 through A.IV.4
	40 CFR 60.116b	see A.III.8 through A.III.10, and A.IV.5
	40 CFR 63 Subpart CC:	
	40 CFR 63.640(n)(1)	Overlap of subpart CC with other regulations for storage vessels - if subject to the provisions of 40 CFR subpart Kb, required to comply only

with the requirements of 40 CFR subpart Kb

2. Additional Terms and Conditions

2.a The maximum true vapor pressure of organic liquid stored in this storage tank shall not exceed 11.1 psia.

2.b The fixed roof storage tank shall be equipped with an internal floating roof.

2.c 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.d All openings, except stub drains, shall be equipped with a cover, seal or lid, which is in the closed position at all times, except when in actual use for tank gauging or sampling.

2.e The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

2.f Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

i. A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.

ii. 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.

iii. A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

2.g. Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

2.h Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

2.i Automatic bleeder vents shall be equipped with a gasket and 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.j Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

2.k Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

2.l Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

2.m Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

2.n The storage tank was installed in 1949 and modified on August 1, 1996, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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.

Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

ii. For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(1) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(2) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(1) May be obtained from standard reference texts, or

(2) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or

(3) Measured by an appropriate method approved by the Administrator; or

(4) Calculated by an appropriate method approved by the Administrator.

2. Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the permittee shall repair the items before filling the storage vessel.

3. For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in A.IV.3. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

4. For vessels equipped with a double-seal system as specified in A.I.2.f.ii.:

4.a Visually inspect the vessel as specified in A.III.5. at least every 5 years; or

4.b Visually inspect the vessel as specified in A.III.3.

5. Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal 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 surfaces 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 refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in A.III.3 and A.III.4.b and at intervals no greater than 5 years in the case of vessels specified in A.III.4.a.

6. The permittee shall keep copies of all reports and records required in A.IV.2, A.IV.3, and A.IV.4, for at least 2 years.

7. Keep a record of each inspection performed as required by A.III.2, A.III.3, A.III.4, and A.III.5. Each record shall identify the storage vessel on which the inspection was performed and shall

contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

8. The permittee shall keep copies of all records required by A.III.2 through A.III.10, excluding A.III.9, for at least 2 years.

9. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel (shall be kept for the life of the source).

10. The permittee of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements.

10.a Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in A.III.1.b.

10.b For vessels in which the vapor pressure of the anticipated liquid composition is above 76.6 kPa (11.1 psia), an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:

i. ASTM Method D2879-83 (incorporated by reference--see 40 CFR. 60.17); or

ii. ASTM Method D323-82 (incorporated by reference--see 40 CFR 60.17); or

iii. As measured by an appropriate method as approved by the Administrator.

IV Reporting Requirements

1. Notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by A.III.2 and A.III.5 to afford the Administrator the opportunity to have an observer present. If the inspection required by A.III.5 is not planned and the permittee could not have known about the inspection 30 days in advance or 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. Alternatively, 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.

2. Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of A.I.2.e through A.I.2.m and A.III.2. This report shall be an attachment to the notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

3. If any of the conditions described in A.III.3 are detected during the annual visual inspection required by A.III.3, a report shall be furnished to the Administrator within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

4. After each inspection required by A.III.4 that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in A.III.4.b, a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of A.I.2.e through A.I.2.m or A.III.4 and list each repair made.

5. The permittee of each storage vessel either with a design capacity greater than or equal to 151 cubic meters storing a liquid with a maximum true vapor pressure that is normally less than 5.2 kPa (0.75 psia) or with a design capacity greater than or equal to 75 cubic meters but less than 151 cubic meters storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa (4.0 psia) shall notify the Administrator within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100215 (T033)
Activity Description: Storage of Organic Liquids

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
above ground external floating roof storage tank with a capacity of 3,412,308 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)	OAC rule 3745-21-09 (Z)	see A.I.2.a-g, A.III.1-4, and A.IV.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e) and (f)	see A.III.5.
	40 CFR 63.646	see A.II.1-3

2. Additional Terms and Conditions

2.a Any welded external floating roof storage tank equipped with a liquid-mounted primary seal and rim-mounted secondary seal, a mechanical shoe primary seal and a rim-mounted secondary seal, a mechanical shoe primary seal and a shoe-mounted, secondary seal, and the shoe-mounted secondary seal was installed prior to 1/10/81, a vapor-mounted primary seal and a rim-mounted secondary seal, and the vapor-mounted primary seal was installed prior to 1/01/81, or a flexible wiper primary seal and a rim-mounted secondary seal, and the flexible wiper primary seal was installed prior to 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 10.0 square inches 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 appropriate Ohio EPA District Office or local air agency 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:

i. A cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use.

ii. A projection into the tank below the liquid surface.

2.c Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

2.d Any rim vent shall be set to open at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports.

2.e 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.f Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.g 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.h The storage tank was installed in 1949 with no modifications, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

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.

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. Each 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 Director (the appropriate Ohio EPA District Office or local air agency) 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.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100220 (T034)
Activity Description: Storage of Organic Liquids

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
above ground external floating roof storage tank with a capacity of 3,412,308 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)	OAC rule 3745-21-09 (Z)	see A.I.2.a-g, A.III.1-4, and A.IV.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e) and (f)	see A.III.5.
	40 CFR 63.646	see A.II.1-3

2. Additional Terms and Conditions

2.a Any welded external floating roof storage tank equipped with a liquid-mounted primary seal and rim-mounted secondary seal, a mechanical shoe primary seal and a rim-mounted secondary seal, a mechanical shoe primary seal and a shoe-mounted, secondary seal, and the shoe-mounted secondary seal was installed prior to 1/10/81, a vapor-mounted primary seal and a rim-mounted secondary seal, and the vapor-mounted primary seal was installed prior to 1/01/81, or a flexible wiper primary seal and a rim-mounted secondary seal, and the flexible wiper primary seal was installed prior to 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 10.0 square inches 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 appropriate Ohio EPA District Office or local air agency 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:

i. A cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use.

ii. A projection into the tank below the liquid surface.

2.c Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

2.d Any rim vent shall be set to open at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports.

2.e 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.f Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.g 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.h The storage tank was installed in 1940 with no modifications, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

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.

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. Each 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 Director (the appropriate Ohio EPA District Office or local air agency) 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.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100222 (T035)
Activity Description: Storage of Organic Liquids

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
above ground external floating roof storage tank with a capacity of 3,412,308 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)	OAC rule 3745-21-09 (Z)	see A.I.2.a-g, A.III.1-4, and A.IV.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e) and (f)	see A.III.5.
	40 CFR 63.646	see A.II.1-3

2. Additional Terms and Conditions

2.a Any welded external floating roof storage tank equipped with a liquid-mounted primary seal and rim-mounted secondary seal, a mechanical shoe primary seal and a rim-mounted secondary seal, a mechanical shoe primary seal and a shoe-mounted, secondary seal, and the shoe-mounted secondary seal was installed prior to 1/10/81, a vapor-mounted primary seal and a rim-mounted secondary seal, and the vapor-mounted primary seal was installed prior to 1/01/81, or a flexible wiper primary seal and a rim-mounted secondary seal, and the flexible wiper primary seal was installed prior to 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 10.0 square inches 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 appropriate Ohio EPA District Office or local air agency 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:

i. A cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use.

ii. A projection into the tank below the liquid surface.

2.c. Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

2.d Any rim vent shall be set to open at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports.

2.e. 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.f Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.g 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.h The storage tank was installed in 1949 with no modifications, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

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.

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. Each 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 Director (the appropriate Ohio EPA District Office or local air agency) 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.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100226 (T036)
Activity Description: Storage of Organic Liquids

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
above ground external floating roof storage tank with a capacity of 4,060,929 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)	OAC rule 3745-21-09 (Z)	see A.I.2.a-g, A.III.1-4, and A.IV.1
	40 CFR 63 Subpart CC: 40 CFR 63.642(e) and (f)	see A.III.5.
	40 CFR 63.646	see A.II.1-3

2. Additional Terms and Conditions

2.a Any welded external floating roof storage tank equipped with a liquid-mounted primary seal and rim-mounted secondary seal, a mechanical shoe primary seal and a rim-mounted secondary seal, a mechanical shoe primary seal and a shoe-mounted, secondary seal, and the shoe-mounted secondary seal was installed prior to 1/10/81, a vapor-mounted primary seal and a rim-mounted secondary seal, and the vapor-mounted primary seal was installed prior to 1/01/81, or a flexible wiper primary seal and a rim-mounted secondary seal, and the flexible wiper primary seal was installed prior to 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 10.0 square inches 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 appropriate Ohio EPA District Office or local air agency 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:

i. A cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use.

ii. A projection into the tank below the liquid surface.

2.c Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

2.d Any rim vent shall be set to open at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports.

2.e 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.f Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.g 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.h In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement executed by the United States Environmental Protection Agency (USEPA) on February 2, 2001, the permittee installed a pole sleeve system on the slotted guidepole of this emissions unit on December 21, 2001.

The pole sleeve system shall meet the following requirements:

i. Each opening through the deck of the floating roof for a slotted guidepole shall be equipped with a deck cover, a pole wiper and a pole sleeve.

ii. The deck cover shall be equipped with a gasket between the cover and the deck.

iii. The sleeve shall extend into the stored liquid.

2.i The storage tank was installed in 1955 with no modifications, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

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.

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. Each 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.

6. In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement, the permittee shall meet the following:

a. The sliding cover shall be in place over the slotted-guidepole opening through the floating roof at all times except when the sliding cover must be removed for access.

b. If the control technology used includes a guidepole float, the float shall be floating within the guidepole at all times except when it must be removed for access to the stored liquid or when the tank is empty.

c. Visually inspect the deck fitting for the slotted guidepole at least once every 10 years and each time the vessel is emptied and degassed.

d. If the slotted guidepole deck fitting or control devices have defects, or if a gap of more than 0.32 centimeters (1/8 inch) exists between any gasket required for control of the slotted guidepole deck fitting and any surface that it is intended to seal, such items shall be repaired before filling or refilling the storage vessel with regulated material.

e. Tanks taken out of hydrocarbon service, for any reason, do not have to have any controls in place during the time they are out of service.

IV Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) 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.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100227 (T037)
Activity Description: Storage of Organic Liquids

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
above ground external floating roof storage tank with a capacity of 4,060,929 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)	OAC rule 3745-21-09 (Z)	see A.I.2.a-g, A.III.1-4, and A.IV.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e) and (f)	see A.III.5.
	40 CFR 63.646	see A.II.1-3

2. Additional Terms and Conditions

2.a Any welded external floating roof storage tank equipped with a liquid-mounted primary seal and rim-mounted secondary seal, a mechanical shoe primary seal and a rim-mounted secondary seal, a mechanical shoe primary seal and a shoe-mounted, secondary seal, and the shoe-mounted secondary seal was installed prior to 1/10/81, a vapor-mounted primary seal and a rim-mounted secondary seal, and the vapor-mounted primary seal was installed prior to 1/01/81, or a flexible wiper primary seal and a rim-mounted secondary seal, and the flexible wiper primary seal was installed prior to 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 10.0 square inches 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 appropriate Ohio EPA District Office or local air agency 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:

i. A cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use.

ii. A projection into the tank below the liquid surface.

2.c Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

2.d Any rim vent shall be set to open at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports.

2.e 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.f Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.g 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.h The storage tank was installed in 1955 with no modifications, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

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.

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. Each 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 Director (the appropriate Ohio EPA District Office or local air agency) 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.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100228 (T038)
Activity Description: Storage of Organic Liquids

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
above ground external floating roof storage tank with a capacity of 4,060,929 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)	OAC rule 3745-21-09 (Z)	see A.I.2.a-g, A.III.1-4, and A.IV.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e) and (f)	see A.III.5.
	40 CFR 63.646	see A.II.1-3

2. Additional Terms and Conditions

2.a Any welded external floating roof storage tank equipped with a liquid-mounted primary seal and rim-mounted secondary seal, a mechanical shoe primary seal and a rim-mounted secondary seal, a mechanical shoe primary seal and a shoe-mounted, secondary seal, and the shoe-mounted secondary seal was installed prior to 1/10/81, a vapor-mounted primary seal and a rim-mounted secondary seal, and the vapor-mounted primary seal was installed prior to 1/01/81, or a flexible wiper primary seal and a rim-mounted secondary seal, and the flexible wiper primary seal was installed prior to 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 10.0 square inches 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 appropriate Ohio EPA District Office or local air agency 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:

i. A cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use.

ii. A projection into the tank below the liquid surface.

2.c. Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

2.d Any rim vent shall be set to open at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports.

2.e 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.f Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.g 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.h In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement executed by the United States Environmental Protection Agency (USEPA) on February 2, 2001, the permittee installed a pole sleeve system on the slotted guidepole of this emissions unit on December 21, 2001.

The pole sleeve system shall meet the following requirements:

i. Each opening through the deck of the floating roof for a slotted guidepole shall be equipped with a deck cover, a pole wiper and a pole sleeve.

ii. The deck cover shall be equipped with a gasket between the cover and the deck.

iii. The sleeve shall extend into the stored liquid.

2.i The storage tank was installed in 1953 with no modifications, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

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.

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. Each 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.

6. In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement, the permittee shall meet the following:

a. The sliding cover shall be in place over the slotted-guidepole opening through the floating roof at all times except when the sliding cover must be removed for access.

b. If the control technology used includes a guidepole float, the float shall be floating within the guidepole at all times except when it must be removed for access to the stored liquid or when the tank is empty.

c. Visually inspect the deck fitting for the slotted guidepole at least once every 10 years and each time the vessel is emptied and degassed.

d. If the slotted guidepole deck fitting or control devices have defects, or if a gap of more than 0.32 centimeters (1/8 inch) exists between any gasket required for control of the slotted guidepole deck fitting and any surface that it is intended to seal, such items shall be repaired before filling or refilling the storage vessel with regulated material.

e. Tanks taken out of hydrocarbon service, for any reason, do not have to have any controls in place during the time they are out of service.

IV Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) 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.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100231 (T039)
Activity Description: Storage of Organic Liquids

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
above ground external floating roof storage tank with a capacity of 3,412,308 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)	OAC rule 3745-21-09 (Z)	see A.I.2.a-g, A.III.1-4, and A.IV.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e) and (f)	see A.III.5.
	40 CFR 63.646	see A.II.1-3

2. Additional Terms and Conditions

2.a Any welded external floating roof storage tank equipped with a liquid-mounted primary seal and rim-mounted secondary seal, a mechanical shoe primary seal and a rim-mounted secondary seal, a mechanical shoe primary seal and a shoe-mounted, secondary seal, and the shoe-mounted secondary seal was installed prior to 1/10/81, a vapor-mounted primary seal and a rim-mounted secondary seal, and the vapor-mounted primary seal was installed prior to 1/01/81, or a flexible wiper primary seal and a rim-mounted secondary seal, and the flexible wiper primary seal was installed prior to 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 10.0 square inches 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 appropriate Ohio EPA District Office or local air agency 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:

i. A cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use.

ii. A projection into the tank below the liquid surface.

2.c Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

2.d Any rim vent shall be set to open at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports.

2.e 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.f Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.g 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.h The storage tank was installed in 1949 with no modifications, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

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.

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. Each 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 Director (the appropriate Ohio EPA District Office or local air agency) 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.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100233 (T040)
Activity Description: Storage of Organic Liquids

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
above ground external floating roof storage tank with a capacity of 3,412,308 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)	OAC rule 3745-21-09 (Z)	see A.I.2.a-g, A.III.1-4, and A.IV.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e) and (f)	see A.III.5.
	40 CFR 63.646	see A.II.1-3

2. Additional Terms and Conditions

2.a Any welded external floating roof storage tank equipped with a liquid-mounted primary seal and rim-mounted secondary seal, a mechanical shoe primary seal and a rim-mounted secondary seal, a mechanical shoe primary seal and a shoe-mounted, secondary seal, and the shoe-mounted secondary seal was installed prior to 1/10/81, a vapor-mounted primary seal and a rim-mounted secondary seal, and the vapor-mounted primary seal was installed prior to 1/01/81, or a flexible wiper primary seal and a rim-mounted secondary seal, and the flexible wiper primary seal was installed prior to 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 10.0 square inches 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 appropriate Ohio EPA District Office or local air agency 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:

i. A cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use.

ii. A projection into the tank below the liquid surface.

2.c Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

2.d Any rim vent shall be set to open at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports.

2.e 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.f Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.g 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.h In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement executed by the United States Environmental Protection Agency (USEPA) on February 2, 2001, the permittee installed a pole sleeve system on the slotted guidepole of this emissions unit on December 21, 2001.

The pole sleeve system shall meet the following requirements:

i. Each opening through the deck of the floating roof for a slotted guidepole shall be equipped with a deck cover, a pole wiper and a pole sleeve.

ii. The deck cover shall be equipped with a gasket between the cover and the deck.

iii. The sleeve shall extend into the stored liquid.

2.i The storage tank was installed in 1953 with no modifications, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

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.

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. Each 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.

6. In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement, the permittee shall meet the following:

a. The sliding cover shall be in place over the slotted-guidepole opening through the floating roof at all times except when the sliding cover must be removed for access.

b. If the control technology used includes a guidepole float, the float shall be floating within the guidepole at all times except when it must be removed for access to the stored liquid or when the tank is empty.

c. Visually inspect the deck fitting for the slotted guidepole at least once every 10 years and each time the vessel is emptied and degassed.

d. If the slotted guidepole deck fitting or control devices have defects, or if a gap of more than 0.32 centimeters (1/8 inch) exists between any gasket required for control of the slotted guidepole deck fitting and any surface that it is intended to seal, such items shall be repaired before filling or refilling the storage vessel with regulated material.

e. Tanks taken out of hydrocarbon service, for any reason, do not have to have any controls in place during the time they are out of service.

IV Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) 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.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100238 (T041)
Activity Description: Storage of Organic Liquids

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
above ground external floating roof storage tank with a capacity of 4,060,929 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)	OAC rule 3745-21-09 (Z)	see A.I.2.a-g, A.III.1-4, and A.IV.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e) and (f)	see A.III.5.
	40 CFR 63.646	see A.II.1-3

2. Additional Terms and Conditions

2.a Any welded external floating roof storage tank equipped with a liquid-mounted primary seal and rim-mounted secondary seal, a mechanical shoe primary seal and a rim-mounted secondary seal, a mechanical shoe primary seal and a shoe-mounted, secondary seal, and the shoe-mounted secondary seal was installed prior to 1/10/81, a vapor-mounted primary seal and a rim-mounted secondary seal, and the vapor-mounted primary seal was installed prior to 1/01/81, or a flexible wiper primary seal and a rim-mounted secondary seal, and the flexible wiper primary seal was installed prior to 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 10.0 square inches 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 appropriate Ohio EPA District Office or local air agency 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:

i. A cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use.

ii. A projection into the tank below the liquid surface.

2.c Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

2.d Any rim vent shall be set to open at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports.

2.e 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.f Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.g 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.h In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement executed by the United States Environmental Protection Agency (USEPA) on February 2, 2001, the permittee installed a pole sleeve system on the slotted guidepole of this emissions unit on December 21, 2001.

The pole sleeve system shall meet the following requirements:

i. Each opening through the deck of the floating roof for a slotted guidepole shall be equipped with a deck cover, a pole wiper and a pole sleeve.

ii. The deck cover shall be equipped with a gasket between the cover and the deck.

iii. The sleeve shall extend into the stored liquid.

2.i The storage tank was installed in 1954 with no modifications, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

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.

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. Each 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.

6. In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement, the permittee shall meet the following:

a. The sliding cover shall be in place over the slotted-guidepole opening through the floating roof at all times except when the sliding cover must be removed for access.

b. If the control technology used includes a guidepole float, the float shall be floating within the guidepole at all times except when it must be removed for access to the stored liquid or when the tank is empty.

c. Visually inspect the deck fitting for the slotted guidepole at least once every 10 years and each time the vessel is emptied and degassed.

d. If the slotted guidepole deck fitting or control devices have defects, or if a gap of more than 0.32 centimeters (1/8 inch) exists between any gasket required for control of the slotted guidepole deck fitting and any surface that it is intended to seal, such items shall be repaired before filling or refilling the storage vessel with regulated material.

e. Tanks taken out of hydrocarbon service, for any reason, do not have to have any controls in place during the time they are out of service.

IV Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) 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.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100239 (T042)
Activity Description: Storage of Organic Liquids

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
above ground external floating roof storage tank with a capacity of 4,275,820 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)	OAC rule 3745-21-09 (Z)	see A.I.2.a-g, A.III.1-4, and A.IV.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e) and (f)	see A.III.5.
	40 CFR 63.646	see A.II.1-3

2. Additional Terms and Conditions

2.a Any welded external floating roof storage tank equipped with a liquid-mounted primary seal and rim-mounted secondary seal, a mechanical shoe primary seal and a rim-mounted secondary seal, a mechanical shoe primary seal and a shoe-mounted, secondary seal, and the shoe-mounted secondary seal was installed prior to 1/10/81, a vapor-mounted primary seal and a rim-mounted secondary seal, and the vapor-mounted primary seal was installed prior to 1/01/81, or a flexible wiper primary seal and a rim-mounted secondary seal, and the flexible wiper primary seal was installed prior to 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 10.0 square inches 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 appropriate Ohio EPA District Office or local air agency 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:

i. A cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use.

ii. A projection into the tank below the liquid surface.

2.c Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

2.d Any rim vent shall be set to open at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports.

2.e 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.f Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.g 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.h The storage tank was installed in 1956 with no modifications, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

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.

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. Each 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 Director (the appropriate Ohio EPA District Office or local air agency) 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.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100244 (T043)
Activity Description: Storage of Organic Liquids

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
above ground external floating roof storage tank with a capacity of 4,060,929 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)	OAC rule 3745-21-09 (Z)	see A.I.2.a-g, A.III.1-4, and A.IV.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e) and (f)	see A.III.5.
	40 CFR 63.646	see A.II.1-3

2. Additional Terms and Conditions

2.a Any welded external floating roof storage tank equipped with a liquid-mounted primary seal and rim-mounted secondary seal, a mechanical shoe primary seal and a rim-mounted secondary seal, a mechanical shoe primary seal and a shoe-mounted, secondary seal, and the shoe-mounted secondary seal was installed prior to 1/10/81, a vapor-mounted primary seal and a rim-mounted secondary seal, and the vapor-mounted primary seal was installed prior to 1/01/81, or a flexible wiper primary seal and a rim-mounted secondary seal, and the flexible wiper primary seal was installed prior to 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 10.0 square inches 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 appropriate Ohio EPA District Office or local air agency 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:

i. A cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use.

ii. A projection into the tank below the liquid surface.

2.c Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

2.d Any rim vent shall be set to open at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports.

2.e 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.f Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.g 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.h In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement executed by the United States Environmental Protection Agency (USEPA) on February 2, 2001, the permittee installed a pole sleeve system on the slotted guidepole of this emissions unit on December 21, 2001.

The pole sleeve system shall meet the following requirements:

i. Each opening through the deck of the floating roof for a slotted guidepole shall be equipped with a deck cover, a pole wiper and a pole sleeve.

ii. The deck cover shall be equipped with a gasket between the cover and the deck.

iii. The sleeve shall extend into the stored liquid.

2.i The storage tank was installed in 1954 with no modifications, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

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.

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. Each 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.

6. In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement, the permittee shall meet the following:

a. The sliding cover shall be in place over the slotted-guidepole opening through the floating roof at all times except when the sliding cover must be removed for access.

b. If the control technology used includes a guidepole float, the float shall be floating within the guidepole at all times except when it must be removed for access to the stored liquid or when the tank is empty.

c. Visually inspect the deck fitting for the slotted guidepole at least once every 10 years and each time the vessel is emptied and degassed.

d. If the slotted guidepole deck fitting or control devices have defects, or if a gap of more than 0.32 centimeters (1/8 inch) exists between any gasket required for control of the slotted guidepole deck fitting and any surface that it is intended to seal, such items shall be repaired before filling or refilling the storage vessel with regulated material.

e. Tanks taken out of hydrocarbon service, for any reason, do not have to have any controls in place during the time they are out of service.

IV Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) 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.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100245 (T044)
Activity Description: Storage of Organic Liquids

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
above ground external floating roof storage tank with a capacity of 4,060,929 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)	OAC rule 3745-21-09 (Z)	see A.I.2.a-g, A.III.1-4, and A.IV.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e) and (f)	see A.III.5.
	40 CFR 63.646	see A.II.1-3

2. Additional Terms and Conditions

2.a Any welded external floating roof storage tank equipped with a liquid-mounted primary seal and rim-mounted secondary seal, a mechanical shoe primary seal and a rim-mounted secondary seal, a mechanical shoe primary seal and a shoe-mounted, secondary seal, and the shoe-mounted secondary seal was installed prior to 1/10/81, a vapor-mounted primary seal and a rim-mounted secondary seal, and the vapor-mounted primary seal was installed prior to 1/01/81, or a flexible wiper primary seal and a rim-mounted secondary seal, and the flexible wiper primary seal was installed prior to 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 10.0 square inches 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 appropriate Ohio EPA District Office or local air agency 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:

i. A cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use.

ii. A projection into the tank below the liquid surface.

2.c Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

2.d Any rim vent shall be set to open at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports.

2.e 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.f Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.g 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.h The storage tank was installed in 1954 with no modifications, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

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.

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. Each 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 Director (the appropriate Ohio EPA District Office or local air agency) 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.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100248 (T045)
Activity Description: Storage of Organic Liquids

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
above ground external floating roof storage tank with a capacity of 4,060,929 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)	OAC rule 3745-21-09 (Z)	see A.I.2.a-g, A.III.1-4, and A.IV.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e) and (f)	see A.III.5.
	40 CFR 63.646	see A.II.1-3

2. Additional Terms and Conditions

2.a Any welded external floating roof storage tank equipped with a liquid-mounted primary seal and rim-mounted secondary seal, a mechanical shoe primary seal and a rim-mounted secondary seal, a mechanical shoe primary seal and a shoe-mounted, secondary seal, and the shoe-mounted secondary seal was installed prior to 1/10/81, a vapor-mounted primary seal and a rim-mounted secondary seal, and the vapor-mounted primary seal was installed prior to 1/01/81, or a flexible wiper primary seal and a rim-mounted secondary seal, and the flexible wiper primary seal was installed prior to 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 10.0 square inches 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 appropriate Ohio EPA District Office or local air agency 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:

i. A cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use.

ii. A projection into the tank below the liquid surface.

2.c Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

2.d Any rim vent shall be set to open at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports.

2.e 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.f Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.g 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.h In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement executed by the United States Environmental Protection Agency (USEPA) on February 2, 2001, the permittee installed a pole sleeve system on the slotted guidepole of this emissions unit on December 21, 2001.

The pole sleeve system shall meet the following requirements:

i. Each opening through the deck of the floating roof for a slotted guidepole shall be equipped with a deck cover, a pole wiper and a pole sleeve.

ii. The deck cover shall be equipped with a gasket between the cover and the deck.

iii. The sleeve shall extend into the stored liquid.

2.i The storage tank was installed in 1953 with no modifications, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

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.

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. Each 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.

6. In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement, the permittee shall meet the following:

a. The sliding cover shall be in place over the slotted-guidepole opening through the floating roof at all times except when the sliding cover must be removed for access.

b. If the control technology used includes a guidepole float, the float shall be floating within the guidepole at all times except when it must be removed for access to the stored liquid or when the tank is empty.

c. Visually inspect the deck fitting for the slotted guidepole at least once every 10 years and each time the vessel is emptied and degassed.

d. If the slotted guidepole deck fitting or control devices have defects, or if a gap of more than 0.32 centimeters (1/8 inch) exists between any gasket required for control of the slotted guidepole deck fitting and any surface that it is intended to seal, such items shall be repaired before filling or refilling the storage vessel with regulated material.

e. Tanks taken out of hydrocarbon service, for any reason, do not have to have any controls in place during the time they are out of service.

IV Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) 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.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100250 (T046)
Activity Description: Storage of Organic Liquids

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
above ground external floating roof storage tank with a capacity of 484,703 gallons (riveted or bolted shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)	OAC rule 3745-21-09 (Z)	see A.I.2.a-g, A.III.1-4, and A.IV.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e) and (f)	see A.III.5.
	40 CFR 63.646	see A.II.1-3

2. Additional Terms and Conditions

2.a Any welded external floating roof storage tank equipped with a liquid-mounted primary seal and rim-mounted secondary seal, a mechanical shoe primary seal and a rim-mounted secondary seal, a mechanical shoe primary seal and a shoe-mounted, secondary seal, and the shoe-mounted secondary seal was installed prior to 1/10/81, a vapor-mounted primary seal and a rim-mounted secondary seal, and the vapor-mounted primary seal was installed prior to 1/01/81, or a flexible wiper primary seal and a rim-mounted secondary seal, and the flexible wiper primary seal was installed prior to 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 10.0 square inches 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 appropriate Ohio EPA District Office or local air agency 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:

i. A cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use.

ii. A projection into the tank below the liquid surface.

2.c Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

2.d Any rim vent shall be set to open at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports.

2.e 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.f Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.g 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.h The storage tank was installed in 1929 with no modifications, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

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.

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. Each 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 Director (the appropriate Ohio EPA District Office or local air agency) 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.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100251 (T047)
Activity Description: Storage of Organic Liquids

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
above-ground, external floating roof storage tank with a capacity of 719,123 gallons (welded shell construction with mechanical shoe primary seal and rim-mounted, flexible wiper secondary seal)	OAC rule 3745-21-09(Z)(3)(c)	exempt, see A.I.2.a and A.II.1
	40 CFR Part 63, Subpart CC	see A.I.2.b

2. Additional Terms and Conditions

2.a This emissions unit is exempt from the requirements of OAC rule 3745-21-09(Z)(1) and 3745-21-09(Z)(2) as long as the permittee does not store any petroleum liquid with a maximum true vapor pressure greater than or equal to 1.5 pounds per square inch absolute.

2.b Based on the operational restriction in A.II.1, this emissions unit is a Group 2 storage vessel, as defined in 40 CFR 63.641 [i.e., storage vessel at an existing source with a stored-liquid maximum true vapor pressure less than 10.4 kPa (1.51 psia)]; therefore, it is exempt from the requirements of Subpart CC.

2.c The storage tank was installed in 1927 with no modifications, and stores organic liquids with a maximum true vapor pressure of 1.49 psia.

II Operational Restrictions

1. The permittee shall not place, store, or hold in this external floating roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than or equal to 1.5 pounds per square inch absolute.

III Monitoring and/or Recordkeeping

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 pound per square inch absolute.

IV Reporting Requirements

1. If the permittee places, stores, or holds in the external floating roof tank any petroleum liquid with a true vapor pressure which is greater than 1.5 pounds per square inch absolute, and such tank does not comply with the requirements of OAC rule 3745-21-09(Z)(1), the permittee shall so notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100327 (T048)
Activity Description: Storage of Organic Liquids

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
above ground external floating roof storage tank with a capacity of 4,541,305 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)	OAC rule 3745-21-09 (Z)	see A.I.2.a-g, A.III.1-4, and A.IV.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e) and (f)	see A.III.5.
	40 CFR 63.646	see A.II.1-3

2. Additional Terms and Conditions

2.a. Any welded external floating roof storage tank equipped with a liquid-mounted primary seal and rim-mounted secondary seal, a mechanical shoe primary seal and a rim-mounted secondary seal, a mechanical shoe primary seal and a shoe-mounted, secondary seal, and the shoe-mounted secondary seal was installed prior to 1/10/81, a vapor-mounted primary seal and a rim-mounted secondary seal, and the vapor-mounted primary seal was installed prior to 1/01/81, or a flexible wiper primary seal and a rim-mounted secondary seal, and the flexible wiper primary seal was installed prior to 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 10.0 square inches 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 appropriate Ohio EPA District Office or local air agency 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:

i. A cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use.

ii. A projection into the tank below the liquid surface.

2.c Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

2.d Any rim vent shall be set to open at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports.

2.e 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.f Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.g 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.h In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement executed by the United States Environmental Protection Agency (USEPA) on February 2, 2001, the permittee installed a pole sleeve system on the slotted guidepole of this emissions unit on December 21, 2001.

The pole sleeve system shall meet the following requirements:

i. Each opening through the deck of the floating roof for a slotted guidepole shall be equipped with a deck cover, a pole wiper and a pole sleeve.

ii. The deck cover shall be equipped with a gasket between the cover and the deck.

iii. The sleeve shall extend into the stored liquid.

2.i The storage tank was installed in 1967 with no modifications, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

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.

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. Each 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.

6. In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement, the permittee shall meet the following:

a. The sliding cover shall be in place over the slotted-guidepole opening through the floating roof at all times except when the sliding cover must be removed for access.

b. If the control technology used includes a guidepole float, the float shall be floating within the guidepole at all times except when it must be removed for access to the stored liquid or when the tank is empty.

c. Visually inspect the deck fitting for the slotted guidepole at least once every 10 years and each time the vessel is emptied and degassed.

d. If the slotted guidepole deck fitting or control devices have defects, or if a gap of more than 0.32 centimeters (1/8 inch) exists between any gasket required for control of the slotted guidepole deck fitting and any surface that it is intended to seal, such items shall be repaired before filling or refilling the storage vessel with regulated material.

e. Tanks taken out of hydrocarbon service, for any reason, do not have to have any controls in place during the time they are out of service.

IV Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) 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.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100223 (T049)
Activity Description: Storage of Organic Liquids

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
above ground external floating roof storage tank with a capacity of 4,060,929 gallons (welded shell construction, mechanical shoe primary seal rim-mounted, flexible wiper secondary seal)	OAC rule 3745-21-09 (Z)	see A.I.2.a-g, A.III.1-4, and A.IV.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e) and (f)	see A.III.5.
	40 CFR 63.646	see A.II.1-3

2. Additional Terms and Conditions

2.a Any welded external floating roof storage tank equipped with a liquid-mounted primary seal and rim-mounted secondary seal, a mechanical shoe primary seal and a rim-mounted secondary seal, a mechanical shoe primary seal and a shoe-mounted, secondary seal, and the shoe-mounted secondary seal was installed prior to 1/10/81, a vapor-mounted primary seal and a rim-mounted secondary seal, and the vapor-mounted primary seal was installed prior to 1/01/81, or a flexible wiper primary seal and a rim-mounted secondary seal, and the flexible wiper primary seal was installed prior to 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 10.0 square inches 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 appropriate Ohio EPA District Office or local air agency 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:

i. A cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use.

ii. A projection into the tank below the liquid surface.

2.c Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

2.d Any rim vent shall be set to open at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports.

2.e 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.f Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.g 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.h The storage tank was installed in 1950 with no modifications, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

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.

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. Each 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 Director (the appropriate Ohio EPA District Office or local air agency) 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.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100229 (T053)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof tank with a capacity of 3,412,308 gallons	OAC rule 3745-21-09 (L)	none, see A.II.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.2
	40 CFR 63.646	see A.II.1, A.III.1, and A.IV.1

2. Additional Terms and Conditions

2.a. The storage tank was installed in 1950 with no modifications, and stores organic liquids with a maximum true vapor pressure less than 10.4 kPa (1.51 psia).

This is a Group 2 storage vessel (at an existing source, and the stored-liquid maximum true vapor pressure is less than 10.4 kPa (1.51 psia)).

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 or equal to 10.4 kPa (1.51 psia).

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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. Each 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. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 1.51 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100230 (T054)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof tank with a capacity of 3,412,308 gallons	OAC rule 3745-21-09 (L)	none, see A.II.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.2
	40 CFR 63.646	see A.II.1, A.III.1, and A.IV.1

2. Additional Terms and Conditions

2.a The storage tank was installed in 1952 with no modifications, and stores organic liquids with a maximum true vapor pressure less than 10.4 kPa (1.51 psia).

This is a Group 2 storage vessel (at an existing source, and the stored-liquid maximum true vapor pressure is less than 10.4 kPa (1.51 psia)).

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 or equal to 10.4 kPa (1.51 psia).

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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. Each 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. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 1.51 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100232 (T055)
Activity Description: Storage of Organic Liquids

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
above ground fixed roof tank (2,820,090 gallons)	OAC rule 3745-21-09 (L)	none, see A.II.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.2
	40 CFR 63.646	see A.II.1, A.III.1, and A.IV.1

2. Additional Terms and Conditions

2.a. The storage tank was installed in 1892 with no modifications, and stores organic liquids with a maximum true vapor pressure less than 10.4 kPa (1.51 psia).

This is a Group 2 storage vessel (at an existing source, and the stored-liquid maximum true vapor pressure is less than 10.4 kPa (1.51 psia)).

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 or equal to 10.4 kPa (1.51 psia).

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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. Each 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. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 1.51 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100235 (T057)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof tank with a capacity of 3,412,308 gallons	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.2
	40 CFR 63.646	see A.II.1, A.III.1, and A.IV.1
	OAC rule 3745-21-09 (L)	none, see A.II.1

2. Additional Terms and Conditions

2.a The storage tank was installed in 1953 with no modifications, and stores organic liquids with a maximum true vapor pressure less than 10.4 kPa (1.51 psia).

This is a Group 2 storage vessel (at an existing source, and the stored-liquid maximum true vapor pressure is less than 10.4 kPa (1.51 psia)).

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 or equal to 10.4 kPa (1.51 psia).

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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. Each 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. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 1.51 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100236 (T058)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof tank with a capacity of 3,412,308 gallons	OAC rule 3745-21-09 (L)	none, see A.II.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.2
	40 CFR 63.646	see A.II.1, A.III.1, and A.IV.1

2. Additional Terms and Conditions

2.a The storage tank was installed in 1953 with no modifications, and stores organic liquids with a maximum true vapor pressure less than 10.4 kPa (1.51 psia).

This is a Group 2 storage vessel (at an existing source, and the stored-liquid maximum true vapor pressure is less than 10.4 kPa (1.51 psia)).

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 or equal to 10.4 kPa (1.51 psia).

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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. Each 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. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 1.51 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100246 (T059)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof tank with a capacity of 4,060,929 gallons	40 CFR 63 Supbart CC:	
	40 CFR 63.642(e)	see A.III.2
	40 CFR 63.646	see A.II.1, A.III.1, and A.IV.1
	OAC rule 3745-21-09(L)	none, see A.II.1

2. Additional Terms and Conditions

2.a The storage tank was installed in 1953 with no modifications, and stores organic liquids with a maximum true vapor pressure less than 10.4 kPa (1.51 psia).

This is a Group 2 storage vessel (at an existing source, and the stored-liquid maximum true vapor pressure is less than 10.4 kPa (1.51 psia)).

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 or equal to 10.4 kPa (1.51 psia).

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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. Each 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. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 1.51 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100247 (T060)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof tank with a capacity of 4,060,929 gallons	OAC rule 3745-21-09 (L)	none, see A.II.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.2
	40 CFR 63.646	see A.II.1, A.III.1, and A.IV.1

2. Additional Terms and Conditions

2.a The storage tank was installed in 1953 with no modifications, and stores organic liquids with a maximum true vapor pressure less than 10.4 kPa (1.51 psia).

This is a Group 2 storage vessel (at an existing source, and the stored-liquid maximum true vapor pressure is less than 10.4 kPa (1.51 psia)).

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 or equal to 10.4 kPa (1.51 psia).

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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. Each 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. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 1.51 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100249 (T061)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof tank with a capacity of 4,060,929 gallons	OAC rule 3745-21-09 (L)	none, see A.II.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.2
	40 CFR 63.646	see A.II.1, A.III.1, and A.IV.1

2. Additional Terms and Conditions

2.a The storage tank was installed in 1955 with no modifications, and stores organic liquids with a maximum true vapor pressure less than 10.4 kPa (1.51 psia).

This is a Group 2 storage vessel (at an existing source, and the stored-liquid maximum true vapor pressure is less than 10.4 kPa (1.51 psia)).

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 or equal to 10.4 kPa (1.51 psia).

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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. Each 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. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 1.51 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100252 (T062)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof tank with a capacity of 533,173 gallons	OAC rule 3745-21-09 (L)	none, see A.II.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.2
	40 CFR 63.646	see A.II.1, A.III.1, and A.IV.1

2. Additional Terms and Conditions

2.a The storage tank was installed in 1935 with no modifications, and stores organic liquids with a maximum true vapor pressure less than 10.4 kPa (1.51 psia).

This is a Group 2 storage vessel (at an existing source, and the stored-liquid maximum true vapor pressure is less than 10.4 kPa (1.51 psia)).

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 or equal to 10.4 kPa (1.51 psia).

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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. Each 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. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 1.51 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100263 (T064)
Activity Description: Storage of Organic Liquids

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
above ground fixed roof tank (2,284,273 gallons)	OAC rule 3745-21-09 (L)	none, see A.II.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.2
	40 CFR 63.646	see A.II.1, A.III.1, and A.IV.1

2. Additional Terms and Conditions

2.a The storage tank was installed in 1890 with no modifications, and stores organic liquids with a maximum true vapor pressure less than 10.4 kPa (1.51 psia).

This is a Group 2 storage vessel (at an existing source, and the stored-liquid maximum true vapor pressure is less than 10.4 kPa (1.51 psia)).

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 or equal to 10.4 kPa (1.51 psia).

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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. Ech 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. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 1.51 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100264 (T065)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof tank with a capacity of 2,284,273 gallons	OAC rule 3745-21-09 (L)	none, see A.II.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.2
	40 CFR 63.646	see A.II.1, A.III.1, and A.IV.1

2. Additional Terms and Conditions

2.a The storage tank was installed in 1954 with no modifications, and stores organic liquids with a maximum true vapor pressure less than 10.4 kPa (1.51 psia).

This is a Group 2 storage vessel (at an existing source, and the stored-liquid maximum true vapor pressure is less than 10.4 kPa (1.51 psia)).

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 or equal to 10.4 kPa (1.51 psia).

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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. Each 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. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 1.51 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100324 (T066)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof tank with a capacity of 4,235,399 gallons	OAC rule 3745-21-09 (L)	none, see A.II.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.2
	40 CFR 63.646	see A.II.1, A.III.1, and A.IV.1

2. Additional Terms and Conditions

2.a The storage tank was installed in 1968 with no modifications, and stores organic liquids with a maximum true vapor pressure less than 10.4 kPa (1.51 psia).

This is a Group 2 storage vessel (at an existing source, and the stored-liquid maximum true vapor pressure is less than 10.4 kPa (1.51 psia)).

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 or equal to 10.4 kPa (1.51 psia).

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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. Each 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. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 1.51 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100325 (T067)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof tank with a capacity of 4,235,399 gallons	OAC rule 3745-21-09 (L)	none, see A.II.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.2
	40 CFR 63.646	see A.II.1, A.III.1, and A.IV.1

2. Additional Terms and Conditions

2.a The storage tank was installed in 1968 with no modifications, and stores organic liquids with a maximum true vapor pressure less than 10.4 kPa (1.51 psia).

This is a Group 2 storage vessel (at an existing source, and the stored-liquid maximum true vapor pressure is less than 10.4 kPa (1.51 psia)).

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 or equal to 10.4 kPa (1.51 psia).

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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. Each 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. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 1.51 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100326 (T068)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof tank with a capacity of 4,235,399 gallons	OAC rule 3745-21-09 (L)	none, see A.II.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.2
	40 CFR 63.646	see A.II.1, A.III.1, and A.IV.1

2. Additional Terms and Conditions

2.a. The storage tank was installed in 1970 with no modifications, and stores organic liquids with a maximum true vapor pressure less than 10.4 kPa (1.51 psia).

This is a Group 2 storage vessel (at an existing source, and the stored-liquid maximum true vapor pressure is less than 10.4 kPa (1.51 psia)).

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 or equal to 10.4 kPa (1.51 psia).

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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. Each 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. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 1.51 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100025 (T070)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof storage tank with an internal floating roof and a capacity of 88,128 gallons	OAC rule 3745-21-09 (L)	see A.I.2.b and A.I.2.c
	40 CFR Part 60, Subpart Ka	see A.I.2.d and A.I.2.e
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.6
	40 CFR 63.646	see A.II.1 through A.II.3, and shall comply with 40 CFR 63.119 through 63.121 (see A.I.2.g through A.I.2.k and A.III.7 through A.III.13)

2. Additional Terms and Conditions

2.a The storage tank was installed in 1982 with no modifications, and stores slop oil with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

2.b The fixed roof storage tank shall be equipped with an internal floating roof.

2.c 40 CFR 63 Subpart CC regulations overlap with those of OAC rule 3745-21-09(L).

2.d The permittee of each storage vessel which contains a petroleum liquid which, as stored, has a true vapor pressure equal to or greater than 10.3 kPa (1.5 psia) but not greater than 76.6 kPa (11.1 psia) shall equip the storage vessel with the following:

A fixed roof with an internal floating type cover equipped with a continuous closure device between the tank wall and the cover edge. The cover is to be floating at all times, (i.e., off the leg supports) except during initial fill and when the tank is completely emptied and subsequently refilled. The process of emptying and refilling when the cover is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. Each opening in the cover except for automatic bleeder vents and the rim space vents is to provide a projection below the liquid surface. Each opening in the cover except for automatic bleeder vents, rim space vents, stub drains and leg sleeves is to be equipped with a cover, seal, or lid which 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 cover is floating except when the cover is being floated off or is being landed on the leg supports. Rim vents are to be set to open only when the cover is being floated off the leg supports or at the manufacturer's recommended setting.

2.e If an existing storage vessel had an internal floating roof with a continuous seal as of July 28, 1988, the requirements listed below do not have to be met until the first time after September 14, 1989, the vessel is emptied and degassed or September 14, 1999, whichever occurs first,

i. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted.

ii. Each penetration of the internal floating roof for the purposes of sampling shall be a sample well. Each sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

iii. Each automatic bleeder vent shall be gasketed.

iv. Rim space vents shall be equipped with a gasket.

v. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

vi. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

2.f Each cover or lid on any opening in the internal floating roof shall be closed (i.e., no visible gaps), except when a device is in actual use. Covers on each access hatch and each automatic gauge float well which are equipped with bolts shall be bolted when they are not in use. Rim space vents are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

2.g 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 in the following:

i. During the initial fill.

ii. After the vessel has been completely emptied and degassed.

iii. When the vessel is completely emptied before being subsequently refilled.

2.h 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.

2.i 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 A.I.2.j, the closure device shall consist of one of the devices listed in the following:

i. A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel or waste management unit and the floating roof. The seal is mounted continuously around the circumference of the vessel or unit.

ii. A metallic shoe seal or mechanical shoe seal means metal sheets that are held vertically against the wall of the storage vessel by springs, weighted levers, or other mechanisms and connected to the floating roof by braces or other means. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

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.

2.j If the internal floating roof is equipped with a vapor-mounted seal as of December 31, 1992, the requirement for one of the seal options specified in A.I.2.i does not apply until the earlier of the dates specified in the following:

i. The next time the storage vessel is emptied and degassed.

ii. No later than 10 years after April 22, 1994.

2.k 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.l In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement executed by the United States Environmental Protection Agency (USEPA) on February 2, 2001, the permittee installed a pole sleeve system on the slotted guidepole of this emissions unit on December 21, 2001.

The pole sleeve system shall meet the following requirements:

i. Each opening through the deck of the floating roof for a slotted guidepole shall be equipped with a deck cover, a pole wiper and a pole sleeve.

ii. The deck cover shall be equipped with a gasket between the cover and the deck.

iii. The sleeve shall extend into the stored liquid.

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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.

Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

ii. For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(1) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(2) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(1) May be obtained from standard reference texts, or

(2) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or

(3) Measured by an appropriate method approved by the Administrator; or

(4) Calculated by an appropriate method approved by the Administrator.

2. Except as provided in A.III.5, the permittee shall maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period.

3. Available data on the typical Reid vapor pressure and the maximum expected storage temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517, unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

4. The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa (2.0 psia) or whose physical properties preclude determination by the recommended method is to be determined from available data and recorded if the estimated true vapor pressure is greater than 6.9 kPa (1.0 psia).

5. The following are exempt from the requirements of A.III.2 through A.III.4: each permittee of each storage vessel storing a petroleum liquid with a Reid vapor pressure of less than 6.9 kPa (1.0 psia) provided the maximum true vapor pressure does not exceed 6.9 kPa (1.0 psia).

6. Each 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.

7. 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 A.III.8 and A.III.9.

8. For vessels equipped with a single-seal system, the permittee shall perform the inspections specified in the following:

a. 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 (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first).

b. Visually inspect the internal floating roof, the seal, gaskets, slotted membranes, and sleeve seals (if any) each time the storage vessel is emptied and degassed, and at least once every 10 years after the compliance date (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first).

9. For vessels equipped with a double-seal system as specified in A.I.2.i.iii, the permittee shall perform either the inspection required in A.III.9.a or the inspections required in A.III.9.b and A.III.9.c.

a. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time the storage vessel is emptied and degassed and at least once every 5 years after the compliance date

(compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first); or

b. 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 (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first), and

c. Visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time the vessel is emptied and degassed and at least once every 10 years after the compliance date (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first).

10. If during the inspections required by A.III.8.a or A.III.8.b, 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 A.III.8.a or A.III.8.b 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.

11. Except as provided in A.III.12, for all the inspections required by A.III.8.b, A.III.9.a, and A.III.9.c, the permittee shall notify the Administrator in writing at least 30 calendar days prior to the refilling of each storage vessel to afford the Administrator the opportunity to have an observer present.

12. If the inspection required by A.III.8.b, A.III.9.a, and A.III.9.c is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel, the permittee shall notify the Administrator at least 7 calendar days prior to the refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, the notification including the written documentation may be made in writing and sent so that it is received by the Administrator at least 7 calendar days prior to refilling.

13. If during the inspections required by A.III.8.b, A.III.9.a, and A.III.9.c, 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; 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 refilling the storage vessel with organic HAP.

14. In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement, the permittee shall meet the following:

a. The sliding cover shall be in place over the slotted-guidepole opening through the floating roof at all times except when the sliding cover must be removed for access.

b. If the control technology used includes a guidepole float, the float shall be floating within the guidepole at all times except when it must be removed for access to the stored liquid or when the tank is empty.

c. Visually inspect the deck fitting for the slotted guidepole at least once every 10 years and each time the vessel is emptied and degassed.

d. If the slotted guidepole deck fitting or control devices have defects, or if a gap of more than 0.32 centimeters (1/8 inch) exists between any gasket required for control of the slotted guidepole deck fitting and any surface that it is intended to seal, such items shall be repaired before filling or refilling the storage vessel with regulated material.

e. Tanks taken out of hydrocarbon service, for any reason, do not have to have any controls in place during the time they are out of service.

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100026 (T071)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof storage tank with an internal floating roof and a capacity of 177,194 gallons	OAC rule 3745-21-09 (L)	see A.I.2.b and A.I.2.c
	40 CFR Part 60, Subpart Ka	see A.I.2.d and A.I.2.e
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.6
	40 CFR 63.646	see A.II.1 through A.II.3, and shall comply with 40 CFR 63.119 through 63.121 (see A.I.2.g through A.I.2.k and A.III.7 through A.III.13)

2. Additional Terms and Conditions

2.a The storage tank was installed in 1982 with no modifications, and stores slop oil with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

2.b The fixed roof storage tank shall be equipped with an internal floating roof.

2.c 40 CFR 63 Subpart CC regulations overlap with those of OAC rule 3745-21-09(L).

2.d The permittee of each storage vessel which contains a petroleum liquid which, as stored, has a true vapor pressure equal to or greater than 10.3 kPa (1.5 psia) but not greater than 76.6 kPa (11.1 psia) shall equip the storage vessel with the following:

A fixed roof with an internal floating type cover equipped with a continuous closure device between the tank wall and the cover edge. The cover is to be floating at all times, (i.e., off the leg supports) except during initial fill and when the tank is completely emptied and subsequently refilled. The process of emptying and refilling when the cover is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. Each opening in the cover except for automatic bleeder vents and the rim space vents is to provide a projection below the liquid surface. Each opening in the cover except for automatic bleeder vents, rim space vents, stub drains and leg sleeves is to be equipped with a cover, seal, or lid which 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 cover is floating except when the cover is being floated off or is being landed on the leg supports. Rim vents are to be set to open only when the cover is being floated off the leg supports or at the manufacturer's recommended setting.

2.e If an existing storage vessel had an internal floating roof with a continuous seal as of July 28, 1988, the requirements listed below do not have to be met until the first time after September 14, 1989, the vessel is emptied and degassed or September 14, 1999, whichever occurs first,

i. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted.

ii. Each penetration of the internal floating roof for the purposes of sampling shall be a sample well. Each sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

iii. Each automatic bleeder vent shall be gasketed.

iv. Rim space vents shall be equipped with a gasket.

v. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

vi. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

2.f Each cover or lid on any opening in the internal floating roof shall be closed (i.e., no visible gaps), except when a device is in actual use. Covers on each access hatch and each automatic gauge float well which are equipped with bolts shall be bolted when they are not in use. Rim space vents are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

2.g 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 in the following:

i. During the initial fill.

ii. After the vessel has been completely emptied and degassed.

iii. When the vessel is completely emptied before being subsequently refilled.

2.h 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.

2.i 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 A.I.2.j, the closure device shall consist of one of the devices listed in the following:

i. A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel or waste management unit and the floating roof. The seal is mounted continuously around the circumference of the vessel or unit.

ii. A metallic shoe seal or mechanical shoe seal means metal sheets that are held vertically against the wall of the storage vessel by springs, weighted levers, or other mechanisms and connected to the floating roof by braces or other means. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

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.

2.j If the internal floating roof is equipped with a vapor-mounted seal as of December 31, 1992, the requirement for one of the seal options specified in A.I.2.i does not apply until the earlier of the dates specified in the following:

i. The next time the storage vessel is emptied and degassed.

ii. No later than 10 years after April 22, 1994.

2.k 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.l In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement executed by the United States Environmental Protection Agency (USEPA) on February 2, 2001, the permittee installed a pole sleeve system on the slotted guidepole of this emissions unit on December 21, 2001.

The pole sleeve system shall meet the following requirements:

i. Each opening through the deck of the floating roof for a slotted guidepole shall be equipped with a deck cover, a pole wiper and a pole sleeve.

ii. The deck cover shall be equipped with a gasket between the cover and the deck.

iii. The sleeve shall extend into the stored liquid.

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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.

Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

ii. For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(1) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(2) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(1) May be obtained from standard reference texts, or

(2) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or

(3) Measured by an appropriate method approved by the Administrator; or

(4) Calculated by an appropriate method approved by the Administrator.

2. Except as provided in A.III.5, the permittee shall maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period.

3. Available data on the typical Reid vapor pressure and the maximum expected storage temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517, unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

4. The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa (2.0 psia) or whose physical properties preclude determination by the recommended method is to be determined from available data and recorded if the estimated true vapor pressure is greater than 6.9 kPa (1.0 psia).

5. The following are exempt from the requirements of A.III.2 through A.III.4: each permittee of each storage vessel storing a petroleum liquid with a Reid vapor pressure of less than 6.9 kPa (1.0 psia) provided the maximum true vapor pressure does not exceed 6.9 kPa (1.0 psia).

6. Each 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.

7. 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 A.III.8 and A.III.9.

8. For vessels equipped with a single-seal system, the permittee shall perform the inspections specified in the following:

a. 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 (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first).

b. Visually inspect the internal floating roof, the seal, gaskets, slotted membranes, and sleeve seals (if any) each time the storage vessel is emptied and degassed, and at least once every 10 years after the compliance date (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first).

9. For vessels equipped with a double-seal system as specified in A.I.2.i.iii, the permittee shall perform either the inspection required in A.III.9.a or the inspections required in A.III.9.b and A.III.9.c.

a. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time the storage vessel is emptied and degassed and at least once every 5 years after the compliance date

(compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first); or

b. 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 (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first), and

c. Visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time the vessel is emptied and degassed and at least once every 10 years after the compliance date (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first).

10. If during the inspections required by A.III.8.a or A.III.8.b, 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 owner or operator 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 A.III.8.a or A.III.8.b cannot be repaired within 45 calendar days and if the vessel cannot be emptied within 45 calendar days, the owner or operator 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.

11. Except as provided in A.III.12, for all the inspections required by A.III.8.b, A.III.9.a, and A.III.9.c, the permittee shall notify the Administrator in writing at least 30 calendar days prior to the refilling of each storage vessel to afford the Administrator the opportunity to have an observer present.

12. If the inspection required by A.III.8.b, A.III.9.a, and A.III.9.c is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel, the permittee shall notify the Administrator at least 7 calendar days prior to the refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, the notification including the written documentation may be made in writing and sent so that it is received by the Administrator at least 7 calendar days prior to refilling.

13. If during the inspections required by A.III.8.b, A.III.9.a, and A.III.9.c, 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; 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 refilling the storage vessel with organic HAP.

14. In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement, the permittee shall meet the following:

a. The sliding cover shall be in place over the slotted-guidepole opening through the floating roof at all times except when the sliding cover must be removed for access.

b. If the control technology used includes a guidepole float, the float shall be floating within the guidepole at all times except when it must be removed for access to the stored liquid or when the tank is empty.

c. Visually inspect the deck fitting for the slotted guidepole at least once every 10 years and each time the vessel is emptied and degassed.

d. If the slotted guidepole deck fitting or control devices have defects, or if a gap of more than 0.32 centimeters (1/8 inch) exists between any gasket required for control of the slotted guidepole deck fitting and any surface that it is intended to seal, such items shall be repaired before filling or refilling the storage vessel with regulated material.

e. Tanks taken out of hydrocarbon service, for any reason, do not have to have any controls in place during the time they are out of service.

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100028 (T072)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof storage tank with an internal floating roof and a capacity of 177,194 gallons	OAC rule 3745-21-09 (L)	see A.I.2.b and A.I.2.c
	40 CFR Part 60, Subpart Ka	see A.I.2.d and A.I.2.e
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.6
	40 CFR 63.646	see A.II.1 through A.II.3, and shall comply with 40 CFR 63.119 through 63.121 (see A.I.2.g through A.I.2.k and A.III.7 through A.III.13)

2. Additional Terms and Conditions

2.a The storage tank was installed in 1981 with no modifications, and stores slop oil with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

2.b The fixed roof storage tank shall be equipped with an internal floating roof.

2.c 40 CFR 63 Subpart CC regulations overlap with those of OAC rule 3745-21-09(L).

2.d The permittee of each storage vessel which contains a petroleum liquid which, as stored, has a true vapor pressure equal to or greater than 10.3 kPa (1.5 psia) but not greater than 76.6 kPa (11.1 psia) shall equip the storage vessel with the following:

A fixed roof with an internal floating type cover equipped with a continuous closure device between the tank wall and the cover edge. The cover is to be floating at all times, (i.e., off the leg supports) except during initial fill and when the tank is completely emptied and subsequently refilled. The process of emptying and refilling when the cover is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. Each opening in the cover except for automatic bleeder vents and the rim space vents is to provide a projection below the liquid surface. Each opening in the cover except for automatic bleeder vents, rim space vents, stub drains and leg sleeves is to be equipped with a cover, seal, or lid which 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 cover is floating except when the cover is being floated off or is being landed on the leg supports. Rim vents are to be set to open only when the cover is being floated off the leg supports or at the manufacturer's recommended setting.

2.e If an existing storage vessel had an internal floating roof with a continuous seal as of July 28, 1988, the requirements listed below do not have to be met until the first time after September 14, 1989, the vessel is emptied and degassed or September 14, 1999, whichever occurs first,

i. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted.

ii. Each penetration of the internal floating roof for the purposes of sampling shall be a sample well. Each sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

iii. Each automatic bleeder vent shall be gasketed.

iv. Rim space vents shall be equipped with a gasket.

v. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

vi. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

2.f Each cover or lid on any opening in the internal floating roof shall be closed (i.e., no visible gaps), except when a device is in actual use. Covers on each access hatch and each automatic gauge float well which are equipped with bolts shall be bolted when they are not in use. Rim space vents are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

2.g 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 in the following:

i. During the initial fill.

ii. After the vessel has been completely emptied and degassed.

iii. When the vessel is completely emptied before being subsequently refilled.

2.h 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.

2.i 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 A.I.2.j, the closure device shall consist of one of the devices listed in the following:

i. A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel or waste management unit and the floating roof. The seal is mounted continuously around the circumference of the vessel or unit.

ii. A metallic shoe seal or mechanical shoe seal means metal sheets that are held vertically against the wall of the storage vessel by springs, weighted levers, or other mechanisms and connected to the floating roof by braces or other means. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

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.

2.j If the internal floating roof is equipped with a vapor-mounted seal as of December 31, 1992, the requirement for one of the seal options specified in A.I.2.i does not apply until the earlier of the dates specified in the following:

i. The next time the storage vessel is emptied and degassed.

ii. No later than 10 years after April 22, 1994.

2.k 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.l In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement executed by the United States Environmental Protection Agency (USEPA) on February 2, 2001, the permittee installed a pole sleeve system on the slotted guidepole of this emissions unit on December 21, 2001.

The pole sleeve system shall meet the following requirements:

i. Each opening through the deck of the floating roof for a slotted guidepole shall be equipped with a deck cover, a pole wiper and a pole sleeve.

ii. The deck cover shall be equipped with a gasket between the cover and the deck.

iii. The sleeve shall extend into the stored liquid.

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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.

Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

ii. For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(1) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(2) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(1) May be obtained from standard reference texts, or

(2) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or

(3) Measured by an appropriate method approved by the Administrator; or

(4) Calculated by an appropriate method approved by the Administrator.

2. Except as provided in A.III.5, the permittee shall maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period.

3. Available data on the typical Reid vapor pressure and the maximum expected storage temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517, unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

4. The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa (2.0 psia) or whose physical properties preclude determination by the recommended method is to be determined from available data and recorded if the estimated true vapor pressure is greater than 6.9 kPa (1.0 psia).

5. The following are exempt from the requirements of A.III.2 through A.III.4: each permittee of each storage vessel storing a petroleum liquid with a Reid vapor pressure of less than 6.9 kPa (1.0 psia) provided the maximum true vapor pressure does not exceed 6.9 kPa (1.0 psia).

6. Each 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.

7. 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 A.III.8 and A.III.9.

8. For vessels equipped with a single-seal system, the permittee shall perform the inspections specified in the following:

a. 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 (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first).

b. Visually inspect the internal floating roof, the seal, gaskets, slotted membranes, and sleeve seals (if any) each time the storage vessel is emptied and degassed, and at least once every 10 years after the compliance date (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first).

9. For vessels equipped with a double-seal system as specified in A.I.2.i.iii, the permittee shall perform either the inspection required in A.III.9.a or the inspections required in A.III.9.b and A.III.9.c.

a. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time the storage vessel is emptied and degassed and at least once every 5 years after the compliance date

(compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first); or

b. 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 (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first), and

c. Visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time the vessel is emptied and degassed and at least once every 10 years after the compliance date (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first).

10. If during the inspections required by A.III.8.a or A.III.8.b, 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 A.III.8.a or A.III.8.b 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.

11. Except as provided in A.III.12, for all the inspections required by A.III.8.b, A.III.9.a, and A.III.9.c, the permittee shall notify the Administrator in writing at least 30 calendar days prior to the refilling of each storage vessel to afford the Administrator the opportunity to have an observer present.

12. If the inspection required by A.III.8.b, A.III.9.a, and A.III.9.c is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel, the permittee shall notify the Administrator at least 7 calendar days prior to the refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, the notification including the written documentation may be made in writing and sent so that it is received by the Administrator at least 7 calendar days prior to refilling.

13. If during the inspections required by A.III.8.b, A.III.9.a, and A.III.9.c, 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; 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 refilling the storage vessel with organic HAP.

14. In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement, the permittee shall meet the following:

a. The sliding cover shall be in place over the slotted-guidepole opening through the floating roof at all times except when the sliding cover must be removed for access.

b. If the control technology used includes a guidepole float, the float shall be floating within the guidepole at all times except when it must be removed for access to the stored liquid or when the tank is empty.

c. Visually inspect the deck fitting for the slotted guidepole at least once every 10 years and each time the vessel is emptied and degassed.

d. If the slotted guidepole deck fitting or control devices have defects, or if a gap of more than 0.32 centimeters (1/8 inch) exists between any gasket required for control of the slotted guidepole deck fitting and any surface that it is intended to seal, such items shall be repaired before filling or refilling the storage vessel with regulated material.

e. Tanks taken out of hydrocarbon service, for any reason, do not have to have any controls in place during the time they are out of service.

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100256 (T073)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof storage tank with an internal floating roof and a capacity of 230,307 gallons	OAC rule 3745-21-09 (L)	see A.I.2.b and A.I.2.c
	40 CFR Part 60, Subpart Ka	see A.I.2.d and A.I.2.e
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.6
	40 CFR 63.646	see A.II.1 through A.II.3, and shall comply with 40 CFR 63.119 through 63.121 (see A.I.2.g through A.I.2.k and A.III.7 through A.III.13)

2. Additional Terms and Conditions

2.a The storage tank was installed in 1981 with no modifications, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

2.b The fixed roof storage tank shall be equipped with an internal floating roof.

2.c 40 CFR 63 Subpart CC regulations overlap with those of OAC rule 3745-21-09(L).

2.d The permittee of each storage vessel which contains a petroleum liquid which, as stored, has a true vapor pressure equal to or greater than 10.3 kPa (1.5 psia) but not greater than 76.6 kPa (11.1 psia) shall equip the storage vessel with the following:

A fixed roof with an internal floating type cover equipped with a continuous closure device between the tank wall and the cover edge. The cover is to be floating at all times, (i.e., off the leg supports) except during initial fill and when the tank is completely emptied and subsequently refilled. The process of emptying and refilling when the cover is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. Each opening in the cover except for automatic bleeder vents and the rim space vents is to provide a projection below the liquid surface. Each opening in the cover except for automatic bleeder vents, rim space vents, stub drains and leg sleeves is to be equipped with a cover, seal, or lid which 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 cover is floating except when the cover is being floated off or is being landed on the leg supports. Rim vents are to be set to open only when the cover is being floated off the leg supports or at the manufacturer's recommended setting.

2.e If an existing storage vessel had an internal floating roof with a continuous seal as of July 28, 1988, the requirements listed below do not have to be met until the first time after September 14, 1989, the vessel is emptied and degassed or September 14, 1999, whichever occurs first,

i. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted.

ii. Each penetration of the internal floating roof for the purposes of sampling shall be a sample well. Each sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

iii. Each automatic bleeder vent shall be gasketed.

iv. Rim space vents shall be equipped with a gasket.

v. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

vi. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

2.f Each cover or lid on any opening in the internal floating roof shall be closed (i.e., no visible gaps), except when a device is in actual use. Covers on each access hatch and each automatic gauge float well which are equipped with bolts shall be bolted when they are not in use. Rim space vents are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

2.g 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 in the following:

i. During the initial fill.

ii After the vessel has been completely emptied and degassed.

iii. When the vessel is completely emptied before being subsequently refilled.

2.h 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.

2.i 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 A.I.2.j, the closure device shall consist of one of the devices listed in the following:

i. A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel or waste management unit and the floating roof. The seal is mounted continuously around the circumference of the vessel or unit.

ii. A metallic shoe seal or mechanical shoe seal means metal sheets that are held vertically against the wall of the storage vessel by springs, weighted levers, or other mechanisms and connected to the floating roof by braces or other means. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

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.

2.j If the internal floating roof is equipped with a vapor-mounted seal as of December 31, 1992, the requirement for one of the seal options specified in A.I.2.i does not apply until the earlier of the dates specified in the following:

i. The next time the storage vessel is emptied and degassed.

ii. No later than 10 years after April 22, 1994.

2.k 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.l In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement executed by the United States Environmental Protection Agency (USEPA) on February 2, 2001, the permittee installed a pole sleeve system on the slotted guidepole of this emissions unit on December 21, 2001.

The pole sleeve system shall meet the following requirements:

i. Each opening through the deck of the floating roof for a slotted guidepole shall be equipped with a deck cover, a pole wiper and a pole sleeve.

ii. The deck cover shall be equipped with a gasket between the cover and the deck.

iii. The sleeve shall extend into the stored liquid.

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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.

Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

ii. For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(1) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(2) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(1) May be obtained from standard reference texts, or

(2) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or

(3) Measured by an appropriate method approved by the Administrator; or

(4) Calculated by an appropriate method approved by the Administrator.

2. Except as provided in A.III.5, the permittee shall maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period.

3. Available data on the typical Reid vapor pressure and the maximum expected storage temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517, unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

4. The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa (2.0 psia) or whose physical properties preclude determination by the recommended method is to be determined from available data and recorded if the estimated true vapor pressure is greater than 6.9 kPa (1.0 psia).

5. The following are exempt from the requirements of A.III.2 through A.III.4: each permittee of each storage vessel storing a petroleum liquid with a Reid vapor pressure of less than 6.9 kPa (1.0 psia) provided the maximum true vapor pressure does not exceed 6.9 kPa (1.0 psia).

6. Each 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.

7. 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 A.III.8 and A.III.9.

8. For vessels equipped with a single-seal system, the permittee shall perform the inspections specified in the following:

a. 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 (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first).

b. Visually inspect the internal floating roof, the seal, gaskets, slotted membranes, and sleeve seals (if any) each time the storage vessel is emptied and degassed, and at least once every 10 years after the compliance date (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first).

9. For vessels equipped with a double-seal system as specified in A.I.2.i.iii, the permittee shall perform either the inspection required in A.III.9.a or the inspections required in A.III.9.b and A.III.9.c.

a. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time the storage vessel is emptied and degassed and at least once every 5 years after the compliance date

(compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first); or

b. 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 (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first), and

c. Visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time the vessel is emptied and degassed and at least once every 10 years after the compliance date (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first).

10. If during the inspections required by A.III.8.a or A.III.8.b, 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 A.III.8.a or A.III.8.b 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.

11. Except as provided in A.III.12, for all the inspections required by A.III.8.b, A.III.9.a, and A.III.9.c, the permittee shall notify the Administrator in writing at least 30 calendar days prior to the refilling of each storage vessel to afford the Administrator the opportunity to have an observer present.

12. If the inspection required by A.III.8.b, A.III.9.a, and A.III.9.c is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel, the permittee shall notify the Administrator at least 7 calendar days prior to the refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, the notification including the written documentation may be made in writing and sent so that it is received by the Administrator at least 7 calendar days prior to refilling.

13. If during the inspections required by A.III.8.b, A.III.9.a, and A.III.9.c, 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; 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 refilling the storage vessel with organic HAP.

14. In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement, the permittee shall meet the following:

a. The sliding cover shall be in place over the slotted-guidepole opening through the floating roof at all times except when the sliding cover must be removed for access.

b. If the control technology used includes a guidepole float, the float shall be floating within the guidepole at all times except when it must be removed for access to the stored liquid or when the tank is empty.

c. Visually inspect the deck fitting for the slotted guidepole at least once every 10 years and each time the vessel is emptied and degassed.

d. If the slotted guidepole deck fitting or control devices have defects, or if a gap of more than 0.32 centimeters (1/8 inch) exists between any gasket required for control of the slotted guidepole deck fitting and any surface that it is intended to seal, such items shall be repaired before filling or refilling the storage vessel with regulated material.

e. Tanks taken out of hydrocarbon service, for any reason, do not have to have any controls in place during the time they are out of service.

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100253 (T074)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof storage tank with an internal floating roof (475,890 gallon capacity)	OAC rule 3745-21-09 (L)	see A.I.2.b and A.I.2.c
	40 CFR Part 60, Subpart Ka	see A.I.2.d and A.I.2.e
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.6
	40 CFR 63.646	see A.II.1 through A.II.3, and shall comply with 40 CFR 63.119 through 63.121 (see A.I.2.g through A.I.2.k and A.III.7 through A.III.13)

2. Additional Terms and Conditions

2.a The storage tank was installed in 1981 with no modifications, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

2.b The fixed roof storage tank shall be equipped with an internal floating roof.

2.c 40 CFR 63 Subpart CC regulations overlap with those of OAC rule 3745-21-09(L).

2.d The permittee of each storage vessel which contains a petroleum liquid which, as stored, has a true vapor pressure equal to or greater than 10.3 kPa (1.5 psia) but not greater than 76.6 kPa (11.1 psia) shall equip the storage vessel with the following:

A fixed roof with an internal floating type cover equipped with a continuous closure device between the tank wall and the cover edge. The cover is to be floating at all times, (i.e., off the leg supports) except during initial fill and when the tank is completely emptied and subsequently refilled. The process of emptying and refilling when the cover is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. Each opening in the cover except for automatic bleeder vents and the rim space vents is to provide a projection below the liquid surface. Each opening in the cover except for automatic bleeder vents, rim space vents, stub drains and leg sleeves is to be equipped with a cover, seal, or lid which 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 cover is floating except when the cover is being floated off or is being landed on the leg supports. Rim vents are to be set to open only when the cover is being floated off the leg supports or at the manufacturer's recommended setting.

2.e If an existing storage vessel had an internal floating roof with a continuous seal as of July 28, 1988, the requirements listed below do not have to be met until the first time after September 14, 1989, the vessel is emptied and degassed or September 14, 1999, whichever occurs first,

i. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted.

ii. Each penetration of the internal floating roof for the purposes of sampling shall be a sample well. Each sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

iii. Each automatic bleeder vent shall be gasketed.

iv. Rim space vents shall be equipped with a gasket.

v. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

vi. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

2.f Each cover or lid on any opening in the internal floating roof shall be closed (i.e., no visible gaps), except when a device is in actual use. Covers on each access hatch and each automatic gauge float well which are equipped with bolts shall be bolted when they are not in use. Rim space vents are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

2.g 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 in the following:

i. During the initial fill.

ii. After the vessel has been completely emptied and degassed.

iii. When the vessel is completely emptied before being subsequently refilled.

2.h 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.

2.i 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 A.I.2.j, the closure device shall consist of one of the devices listed in the following:

i. A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel or waste management unit and the floating roof. The seal is mounted continuously around the circumference of the vessel or unit.

ii. A metallic shoe seal or mechanical shoe seal means metal sheets that are held vertically against the wall of the storage vessel by springs, weighted levers, or other mechanisms and connected to the floating roof by braces or other means. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

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.

2.j If the internal floating roof is equipped with a vapor-mounted seal as of December 31, 1992, the requirement for one of the seal options specified in A.I.2.i does not apply until the earlier of the dates specified in the following:

i. The next time the storage vessel is emptied and degassed.

ii. No later than 10 years after April 22, 1994.

2.k 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.l In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement executed by the United States Environmental Protection Agency (USEPA) on February 2, 2001, the permittee installed a pole sleeve system on the slotted guidepole of this emissions unit on December 21, 2001.

The pole sleeve system shall meet the following requirements:

i. Each opening through the deck of the floating roof for a slotted guidepole shall be equipped with a deck cover, a pole wiper and a pole sleeve.

ii. The deck cover shall be equipped with a gasket between the cover and the deck.

iii. The sleeve shall extend into the stored liquid.

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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.

Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

ii. For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(1) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(2) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(1) May be obtained from standard reference texts, or

(2) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or

(3) Measured by an appropriate method approved by the Administrator; or

(4) Calculated by an appropriate method approved by the Administrator.

2. Except as provided in A.III.5, the permittee shall maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period.

3. Available data on the typical Reid vapor pressure and the maximum expected storage temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517, unless the Administrator specifically requests

that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

4. The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa (2.0 psia) or whose physical properties preclude determination by the recommended method is to be determined from available data and recorded if the estimated true vapor pressure is greater than 6.9 kPa (1.0 psia).

5. The following are exempt from the requirements of A.III.2 through A.III.4: each permittee of each storage vessel storing a petroleum liquid with a Reid vapor pressure of less than 6.9 kPa (1.0 psia) provided the maximum true vapor pressure does not exceed 6.9 kPa (1.0 psia).

6. Each 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.

7. 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 A.III.8 and A.III.9.

8. For vessels equipped with a single-seal system, the permittee shall perform the inspections specified in the following:

   a. 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 (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first).

   b. Visually inspect the internal floating roof, the seal, gaskets, slotted membranes, and sleeve seals (if any) each time the storage vessel is emptied and degassed, and at least once every 10 years after the compliance date (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first).

9. For vessels equipped with a double-seal system as specified in A.I.2.i.iii, the permittee shall perform either the inspection required in A.III.9.a or the inspections required in A.III.9.b and A.III.9.c.

   a. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time the storage vessel is emptied and degassed and at least once every 5 years after the compliance date (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first); or

b. 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 (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first), and

c. Visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time the vessel is emptied and degassed and at least once every 10 years after the compliance date (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first).

10. If during the inspections required by A.III.8.a or A.III.8.b, 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 A.III.8.a or A.III.8.b 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.

11. Except as provided in A.III.12, for all the inspections required by A.III.8.b, A.III.9.a, and A.III.9.c, the permittee shall notify the Administrator in writing at least 30 calendar days prior to the refilling of each storage vessel to afford the Administrator the opportunity to have an observer present.

12. If the inspection required by A.III.8.b, A.III.9.a, and A.III.9.c is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel, the permittee shall notify the Administrator at least 7 calendar days prior to the refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, the notification including the written documentation may be made in writing and sent so that it is received by the Administrator at least 7 calendar days prior to refilling.

13. If during the inspections required by A.III.8.b, A.III.9.a, and A.III.9.c, 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; 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 refilling the storage vessel with organic HAP.

14. In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement, the permittee shall meet the following:

    a. The sliding cover shall be in place over the slotted-guidepole opening through the floating roof at all times except when the sliding cover must be removed for access.

    b. If the control technology used includes a guidepole float, the float shall be floating within the guidepole at all times except when it must be removed for access to the stored liquid or when the tank is empty.

    c. Visually inspect the deck fitting for the slotted guidepole at least once every 10 years and each time the vessel is emptied and degassed.

    d. If the slotted guidepole deck fitting or control devices have defects, or if a gap of more than 0.32 centimeters (1/8 inch) exists between any gasket required for control of the slotted guidepole deck fitting and any surface that it is intended to seal, such items shall be repaired before filling or refilling the storage vessel with regulated material.

    e. Tanks taken out of hydrocarbon service, for any reason, do not have to have any controls in place during the time they are out of service.

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100255 (T075)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof storage tank with an internal floating roof (475,890 gallon capacity)	OAC rule 3745-21-09 (L)	see A.I.2.b and A.I.2.c
	40 CFR Part 60, Subpart Ka	see A.I.2.d and A.I.2.e
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.6
	40 CFR 63.646	see A.II.1 through A.II.3, and shall comply with 40 CFR 63.119 through 63.121 (see A.I.2.g through A.I.2.k and A.III.7 through A.III.13)

2. Additional Terms and Conditions

2.a The storage tank was installed in 1981 with no modifications, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

2.b The fixed roof storage tank shall be equipped with an internal floating roof.

2.c 40 CFR 63 Subpart CC regulations overlap with those of OAC rule 3745-21-09(L).

2.d The permittee of each storage vessel which contains a petroleum liquid which, as stored, has a true vapor pressure equal to or greater than 10.3 kPa (1.5 psia) but not greater than 76.6 kPa (11.1 psia) shall equip the storage vessel with the following:

A fixed roof with an internal floating type cover equipped with a continuous closure device between the tank wall and the cover edge. The cover is to be floating at all times, (i.e., off the leg supports) except during initial fill and when the tank is completely emptied and subsequently refilled. The process of emptying and refilling when the cover is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. Each opening in the cover except for automatic bleeder vents and the rim space vents is to provide a projection below the liquid surface. Each opening in the cover except for automatic bleeder vents, rim space vents, stub drains and leg sleeves is to be equipped with a cover, seal, or lid which 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 cover is floating except when the cover is being floated off or is being landed on the leg supports. Rim vents are to be set to open only when the cover is being floated off the leg supports or at the manufacturer's recommended setting.

2.e If an existing storage vessel had an internal floating roof with a continuous seal as of July 28, 1988, the requirements listed below do not have to be met until the first time after September 14, 1989, the vessel is emptied and degassed or September 14, 1999, whichever occurs first,

i. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted.

ii. Each penetration of the internal floating roof for the purposes of sampling shall be a sample well. Each sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

iii. Each automatic bleeder vent shall be gasketed.

iv. Rim space vents shall be equipped with a gasket.

v. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

vi. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

2.f Each cover or lid on any opening in the internal floating roof shall be closed (i.e., no visible gaps), except when a device is in actual use. Covers on each access hatch and each automatic gauge float well which are equipped with bolts shall be bolted when they are not in use. Rim space vents are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

2.g 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 in the following:

i. During the initial fill.

ii. After the vessel has been completely emptied and degassed.

iii. When the vessel is completely emptied before being subsequently refilled.

2.h 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.

2.i 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 A.I.2.j, the closure device shall consist of one of the devices listed in the following:

i. A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel or waste management unit and the floating roof. The seal is mounted continuously around the circumference of the vessel or unit.

ii. A metallic shoe seal or mechanical shoe seal means metal sheets that are held vertically against the wall of the storage vessel by springs, weighted levers, or other mechanisms and connected to the floating roof by braces or other means. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

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.

2.j If the internal floating roof is equipped with a vapor-mounted seal as of December 31, 1992, the requirement for one of the seal options specified in A.I.2.i does not apply until the earlier of the dates specified in the following:

i. The next time the storage vessel is emptied and degassed.

ii. No later than 10 years after April 22, 1994.

2.k 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.l In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement executed by the United States Environmental Protection Agency (USEPA) on February 2, 2001, the permittee installed a pole sleeve system on the slotted guidepole of this emissions unit on December 21, 2001.

The pole sleeve system shall meet the following requirements:

i. Each opening through the deck of the floating roof for a slotted guidepole shall be equipped with a deck cover, a pole wiper and a pole sleeve.

ii. The deck cover shall be equipped with a gasket between the cover and the deck.

iii. The sleeve shall extend into the stored liquid.

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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.

Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

ii. For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(1) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(2) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(1) May be obtained from standard reference texts, or

(2) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or

(3) Measured by an appropriate method approved by the Administrator; or

(4) Calculated by an appropriate method approved by the Administrator.

2. Except as provided in A.III.5, the permittee shall maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period.

3. Available data on the typical Reid vapor pressure and the maximum expected storage temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517, unless the Administrator specifically requests

that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

4. The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa (2.0 psia) or whose physical properties preclude determination by the recommended method is to be determined from available data and recorded if the estimated true vapor pressure is greater than 6.9 kPa (1.0 psia).

5. The following are exempt from the requirements of A.III.2 through A.III.4: each permittee of each storage vessel storing a petroleum liquid with a Reid vapor pressure of less than 6.9 kPa (1.0 psia) provided the maximum true vapor pressure does not exceed 6.9 kPa (1.0 psia).

6. Each 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.

7. 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 A.III.8 and A.III.9.

8. For vessels equipped with a single-seal system, the permittee shall perform the inspections specified in the following:

   a. 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 (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first).

   b. Visually inspect the internal floating roof, the seal, gaskets, slotted membranes, and sleeve seals (if any) each time the storage vessel is emptied and degassed, and at least once every 10 years after the compliance date (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first).

9. For vessels equipped with a double-seal system as specified in A.I.2.i.iii, the permittee shall perform either the inspection required in A.III.9.a or the inspections required in A.III.9.b and A.III.9.c.

   a. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time the storage vessel is emptied and degassed and at least once every 5 years after the compliance date (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first); or

b. 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 (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first), and

c. Visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time the vessel is emptied and degassed and at least once every 10 years after the compliance date (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first).

10. If during the inspections required by A.III.8.a or A.III.8.b, 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 A.III.8.a or A.III.8.b 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.

11. Except as provided in A.III.12, for all the inspections required by A.III.8.b, A.III.9.a, and A.III.9.c, the permittee shall notify the Administrator in writing at least 30 calendar days prior to the refilling of each storage vessel to afford the Administrator the opportunity to have an observer present.

12. If the inspection required by A.III.8.b, A.III.9.a, and A.III.9.c is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel, the permittee shall notify the Administrator at least 7 calendar days prior to the refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, the notification including the written documentation may be made in writing and sent so that it is received by the Administrator at least 7 calendar days prior to refilling.

13. If during the inspections required by A.III.8.b, A.III.9.a, and A.III.9.c, 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; 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 refilling the storage vessel with organic HAP.

14. In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement, the permittee shall meet the following:

    a. The sliding cover shall be in place over the slotted-guidepole opening through the floating roof at all times except when the sliding cover must be removed for access.

    b. If the control technology used includes a guidepole float, the float shall be floating within the guidepole at all times except when it must be removed for access to the stored liquid or when the tank is empty.

    c. Visually inspect the deck fitting for the slotted guidepole at least once every 10 years and each time the vessel is emptied and degassed.

    d. If the slotted guidepole deck fitting or control devices have defects, or if a gap of more than 0.32 centimeters (1/8 inch) exists between any gasket required for control of the slotted guidepole deck fitting and any surface that it is intended to seal, such items shall be repaired before filling or refilling the storage vessel with regulated material.

    e. Tanks taken out of hydrocarbon service, for any reason, do not have to have any controls in place during the time they are out of service.

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100219 (T076)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof tank with a capacity of 2,820,090 gallons	OAC rule 3745-31-05 (PTI # 03-1102)	see A.I.2.b
	OAC rule 3745-21-09(L)	exempt, see A.II.1
	40 CFR Part 60, Subpart Ka	see A.III.2 through A.III.5
	40 CFR Part 63, Subpart CC	see A.I.2.a and A.II.1

2. Additional Terms and Conditions

2.a Based on the operational restriction in A.II.1, this storage tank is a Group 2 storage vessel, as defined in 40 CFR 63.641 [storage vessel at an existing source with a stored-liquid maximum true vapor pressure less than 10.4 kPa (1.51 psia)]; therefore, it is exempt from the requirements of Subpart CC.

2.b No limits, pursuant to OAC rule 3745-31-05, were established in PTI 03-1102 for this emissions unit.

2.c The storage tank was installed in 1981 with no modifications, and stores organic liquids with a maximum true vapor pressure of 1.49 psia.

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.

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

   a. the types of petroleum liquids stored in the tank.

   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. Each 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.

   Except as provided in section A.III.5, the permittee shall maintain a record of each petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period.

3. Available data on the typical Reid vapor pressure and the maximum expected storage temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517, unless the Administrator or Director specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

4. The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa (2.0 psia) or whose physical properties preclude determination by the recommended method is to be determined from available data and recorded if the estimated true vapor pressure is greater than 6.9 kPa (1.0 psia).

5. The permittee is exempt from the requirements of sections A.III.2 through A.III.4 if the storage tank stores only petroleum liquids with Reid vapor pressures of less than 6.9 kPa (1.0 psia), provided the maximum true vapor pressures of the pertroleum liquids do not exceed 6.9 kPa (1.0 psia).

IV Reporting Requirements

1. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100076 (77A) (T078)
Activity Description: Storage of Organic Liquids

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
above ground internal floating roof tank (56,402 gallons)	OAC rule 3745-21-09 (L)	see A.I.2.a through A.I.2.d and A.III.1
	40 CFR 60 Subpart Kb:	see A.I.2.e through A.I.2.m
	40 CFR 60.112b	see A.III.2 through A.III.5 and A.IV.1
	40 CFR 60.113b	see A.III.6, A.III.7, and A.IV.2 through A.IV.4
	40 CFR 60.115b	see A.III.8 through A.III.10, and A.IV.5
	40 CFR 60.116b	Control requirements, monitoring and/or record keeping requirements, and reporting requirements are satisfied by the requirements in 40 CFR 60 Subpart Kb
	40 CFR 61 Subpart FF	
	40 CFR 63 Subpart CC:	
	40 CFR 63.640(n)(1)	Overlap of subpart CC with other regulations for storage vessels - if subject to the provisions of 40 CFR

subpart Kb, required to comply only with the requirements of 40 CFR subpart Kb

2. Additional Terms and Conditions

2.a The maximum true vapor pressure of organic liquid stored in this storage tank shall not exceed 11.1 psia.

2.b The fixed roof storage tank shall be equipped with an internal floating roof.

2.c 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.d All openings, except stub drains, shall be equipped with a cover, seal or lid, which is in the closed position at all times, except when in actual use for tank gauging or sampling.

2.e The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

2.f Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

i. A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.

ii. 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.

iii. A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

2.g Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

2.h Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

2.i Automatic bleeder vents shall be equipped with a gasket and 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.j Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

2.k Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

2.l Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

2.m Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

2.n The storage tank was installed in 1984 with no modifications, and stores miscellaneous wastes with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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.

Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

ii. For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(1) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(2) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(1) May be obtained from standard reference texts, or

(2) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or

(3) Measured by an appropriate method approved by the Administrator; or

(4) Calculated by an appropriate method approved by the Administrator.

2. Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the permittee shall repair the items before filling the storage vessel.

3. For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in A.IV.3. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

4. For vessels equipped with a double-seal system as specified in A.I.2.f.ii.:

4.a. Visually inspect the vessel as specified in A.III.5. at least every 5 years; or

4.b Visually inspect the vessel as specified in A.III.3.

5. Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal 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 surfaces 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 refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in A.III.3 and A.III.4.b and at intervals no greater than 5 years in the case of vessels specified in A.III.4.a.

6. The permittee shall keep copies of all reports and records required in A.IV.2, A.IV.3, and A.IV.4, for at least 2 years.

7. Keep a record of each inspection performed as required by A.III.2, A.III.3, A.III.4, and A.III.5. Each record shall identify the storage vessel on which the inspection was performed and shall

contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

8. The permittee shall keep copies of all records required by A.III.2 through A.III.10, excluding A.III.9, for at least 2 years.

9. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel (shall be kept for the life of the source).

10. The permittee of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements.

10.a Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in A.III.1.b.

10.b For vessels in which the vapor pressure of the anticipated liquid composition is above 76.6 kPa (11.1 psia), an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:

i. ASTM Method D2879-83 (incorporated by reference--see 40 CFR. 60.17); or

ii. ASTM Method D323-82 (incorporated by reference--see 40 CFR 60.17); or

iii. As measured by an appropriate method as approved by the Administrator.

IV Reporting Requirements

1. Notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by A.III.2 and A.III.5 to afford the Administrator the opportunity to have an observer present. If the inspection required by A.III.5 is not planned and the permittee could not have known about the inspection 30 days in advance or 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. Alternatively, 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.

2. Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of A.I.2.e through A.I.2.m and A.III.2. This report

shall be an attachment to the notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

3. If any of the conditions described in A.III.3 are detected during the annual visual inspection required by A.III.3, a report shall be furnished to the Administrator within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

4. After each inspection required by A.III.4 that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in A.III.4.b, a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of A.I.2.e through A.I.2.m or A.III.4 and list each repair made.

5. The permittee of each storage vessel either with a design capacity greater than or equal to 151 cubic meters storing a liquid with a maximum true vapor pressure that is normally less than 5.2 kPa (0.75 psia) or with a design capacity greater than or equal to 75 cubic meters but less than 151 cubic meters storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa (4.0 psia) shall notify the Administrator within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100351 (T080)
Activity Description: Storage of Organic Liquids

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
above ground internal floating roof tank (1,084,042 gallons)	OAC rule 3745-31-05 (PTI 03-1822)	see A.I.2.n
	OAC rule 3745-21-09 (L)	see A.I.2.a through A.I.2.d and A.III.1
	40 CFR 60 Subpart Kb:	
	40 CFR 60.112b	see A.I.2.e through A.I.2.m
	40 CFR 60.113b	see A.III.2 through A.III.5 and A.IV.1
	40 CFR 60.115b	see A.III.6, A.III.7, and A.IV.2 through A.IV.4
	40 CFR 60.116b	see A.III.8 through A.III.10, and A.IV.5
	40 CFR 61 Subpart FF	Control requirements, monitoring and/or record keeping requirements, and reporting requirements are satisfied by the requirements in 40 CFR 60 Subpart Kb
	40 CFR 63 Subpart CC:	

40 CFR 63.640(n)(1)	Overlap of subpart CC with other regulations for storage vessels - if subject to the provisions of 40 CFR subpart Kb, required to comply only with the requirements of 40 CFR subpart Kb

2. Additional Terms and Conditions

2.a The maximum true vapor pressure of organic liquid stored in this storage tank shall not exceed 11.1 psia.

2.b The fixed roof storage tank shall be equipped with an internal floating roof.

2.c 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.d All openings, except stub drains, shall be equipped with a cover, seal or lid, which is in the closed position at all times, except when in actual use for tank gauging or sampling.

2.e The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

2.f Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

i. A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.

ii. 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.

iii. A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

2.g Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

2.h Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

2.i Automatic bleeder vents shall be equipped with a gasket and 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.j Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

2.k Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

2.l Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

2.m Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

2.n No limits, pursuant to OAC rule 3745-31-05, were established in PTI 03-1822 for this emissions unit.

2.o The storage tank was installed in 1984 with no modifications, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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.

Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

ii. For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(1) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(2) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(1) May be obtained from standard reference texts, or

(2) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or

(3) Measured by an appropriate method approved by the Administrator; or

(4) Calculated by an appropriate method approved by the Administrator.

2. Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the permittee shall repair the items before filling the storage vessel.

3. For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in A.IV.3. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

4. For vessels equipped with a double-seal system as specified in A.I.2.f.ii.:

4.a Visually inspect the vessel as specified in A.III.5. at least every 5 years; or

4.b Visually inspect the vessel as specified in A.III.3.

5. Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal 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 surfaces 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 refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in A.III.3 and A.III.4.b and at intervals no greater than 5 years in the case of vessels specified in A.III.4.a.

6. The permittee shall keep copies of all reports and records required in A.IV.2, A.IV.3, and A.IV.4, for at least 2 years.

7. Keep a record of each inspection performed as required by A.III.2, A.III.3, A.III.4, and A.III.5. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

8. The permittee shall keep copies of all records required by A.III.2 through A.III.10, excluding A.III.9, for at least 2 years.

9. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel (shall be kept for the life of the source).

10. The permittee of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements.

10.a Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in A.III.1.b.

10.b For vessels in which the vapor pressure of the anticipated liquid composition is above 76.6 kPa (11.1 psia), an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:

i. ASTM Method D2879-83 (incorporated by reference--see 40 CFR. 60.17); or

ii. ASTM Method D323-82 (incorporated by reference--see 40 CFR 60.17); or

iii. As measured by an appropriate method as approved by the Administrator.

IV Reporting Requirements

1. Notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by A.III.2 and A.III.5 to afford the Administrator the opportunity to have an observer present. If the inspection required by A.III.5 is not planned and the permittee could not have known about the inspection 30 days in advance or 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. Alternatively, 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.

2. Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of A.I.2.e through A.I.2.m and A.III.2. This report shall be an attachment to the notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

3. If any of the conditions described in A.III.3 are detected during the annual visual inspection required by A.III.3, a report shall be furnished to the Administrator within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

4. After each inspection required by A.III.4 that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in A.III.4.b, a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of A.I.2.e through A.I.2.m or A.III.4 and list each repair made.

5. The permittee of each storage vessel either with a design capacity greater than or equal to 151 cubic meters storing a liquid with a maximum true vapor pressure that is normally less than 5.2 kPa (0.75 psia) or with a design capacity greater than or equal to 75 cubic meters but less than 151 cubic meters storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa (4.0 psia) shall notify the Administrator within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100352 (T081)
Activity Description: Storage of Organic Liquids

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
above ground internal floating roof tank (1,084,042 gallons)	OAC rule 3745-31-05 (PTI 03-1822)	see A.I.2.n
	OAC rule 3745-21-09 (L)	see A.I.2.a through A.I.2.d and A.III.1
	40 CFR 60 Subpart Kb:	
	40 CFR 60.112b	see A.I.2.e through A.I.2.m
	40 CFR 60.113b	see A.III.2 through A.III.5 and A.IV.1
	40 CFR 60.115b	see A.III.6, A.III.7, and A.IV.2 through A.IV.4
	40 CFR 60.116b	see A.III.8 through A.III.10, and A.IV.5
	40 CFR 61 Subpart FF	Control requirements, monitoring and/or record keeping requirements, and reporting requirements are satisfied by the requirements in 40 CFR 60 Subpart Kb
	40 CFR 63 Subpart CC:	

40 CFR 63.640(n)(1)	Overlap of subpart CC with other regulations for storage vessels - if subject to the provisions of 40 CFR subpart Kb, required to comply only with the requirements of 40 CFR subpart Kb

2. Additional Terms and Conditions

2.a The maximum true vapor pressure of organic liquid stored in this storage tank shall not exceed 11.1 psia.

2.b The fixed roof storage tank shall be equipped with an internal floating roof.

2.c 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.d All openings, except stub drains, shall be equipped with a cover, seal or lid, which is in the closed position at all times, except when in actual use for tank gauging or sampling.

2.e The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

2.f Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

i. A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.

ii. 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.

iii. A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

2.g Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

2.h Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

2.i Automatic bleeder vents shall be equipped with a gasket and 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.j Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

2.k Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

2.l Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

2.m Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

2.n No limits, pursuant to OAC rule 3745-31-05, were established in PTI 03-1822 for this emissions unit.

2.o The storage tank was installed in 1984 with no modifications, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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.

Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

ii. For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(1) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(2) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(1) May be obtained from standard reference texts, or

(2) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or

(3) Measured by an appropriate method approved by the Administrator; or

(4) Calculated by an appropriate method approved by the Administrator.

2. Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the permittee shall repair the items before filling the storage vessel.

3. For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in A.IV.3. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

4. For vessels equipped with a double-seal system as specified in A.I.2.f.ii.:

4.a Visually inspect the vessel as specified in A.III.5. at least every 5 years; or

4.b Visually inspect the vessel as specified in A.III.3.

5. Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal 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 surfaces 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 refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in A.III.3 and A.III.4.b and at intervals no greater than 5 years in the case of vessels specified in A.III.4.a.

6. The permittee shall keep copies of all reports and records required in A.IV.2, A.IV.3, and A.IV.4, for at least 2 years.

7. Keep a record of each inspection performed as required by A.III.2, A.III.3, A.III.4, and A.III.5. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

8. The permittee shall keep copies of all records required by A.III.2 through A.III.10, excluding A.III.9, for at least 2 years.

9. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel (shall be kept for the life of the source).

10. The permittee of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements.

10.a Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in A.III.1.b.

10.b For vessels in which the vapor pressure of the anticipated liquid composition is above 76.6 kPa (11.1 psia), an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:

i. ASTM Method D2879-83 (incorporated by reference--see 40 CFR. 60.17); or

ii. ASTM Method D323-82 (incorporated by reference--see 40 CFR 60.17); or

iii. As measured by an appropriate method as approved by the Administrator.

IV Reporting Requirements

1. Notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by A.III.2 and A.III.5 to afford the Administrator the opportunity to have an observer present. If the inspection required by A.III.5 is not planned and the permittee could not have known about the inspection 30 days in advance or 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. Alternatively, 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.

2. Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of A.I.2.e through A.I.2.m and A.III.2. This report

shall be an attachment to the notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

3. If any of the conditions described in A.III.3 are detected during the annual visual inspection required by A.III.3, a report shall be furnished to the Administrator within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

4. After each inspection required by A.III.4 that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in A.III.4.b, a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of A.I.2.e through A.I.2.m or A.III.4 and list each repair made.

5. The permittee of each storage vessel either with a design capacity greater than or equal to 151 cubic meters storing a liquid with a maximum true vapor pressure that is normally less than 5.2 kPa (0.75 psia) or with a design capacity greater than or equal to 75 cubic meters but less than 151 cubic meters storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa (4.0 psia) shall notify the Administrator within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 164559 (T083)
Activity Description: Tank 164559

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
above-ground, fixed roof tank with a capacity of 203,258 gallons	OAC rule 3745-21-09(L)	exempt, see A.II.1
	40 CFR Part 60, Subpart Ka	see A.III.2 through A.III.5
	40 CFR Part 63, Subpart CC	see A.I.2.a and A.II.1

2. Additional Terms and Conditions

2.a The storage tank was installed in 1983 with no modifications, and stores organic liquids with a maximum true vapor pressure less than 1.51 psia.

Based on the operational restriction in A.II.1, this storage tank is a Group 2 storage vessel, as defined in 40 CFR 63.641 [storage vessel at an existing source with a stored-liquid maximum true vapor pressure less than 10.4 kPa (1.51 psia)]; therefore, it is exempt from the requirements of 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.

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

   a. the types of petroleum liquids stored in the tank.

   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. Each 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.

   Except as provided in section A.III.5, the permittee shall maintain a record of each petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period.

3. Available data on the typical Reid vapor pressure and the maximum expected storage temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517, unless the Administrator or Director specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

4. The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa (2.0 psia) or whose physical properties preclude determination by the recommended method is to be determined from available data and recorded if the estimated true vapor pressure is greater than 6.9 kPa (1.0 psia).

5. The permittee is exempt from the requirements of sections A.III.2 through A.III.4 if the storage tank stores only petroleum liquids with Reid vapor pressures of less than 6.9 kPa (1.0 psia), provided the maximum true vapor pressures of the pertroleum liquids do not exceed 6.9 kPa (1.0 psia).

IV Reporting Requirements

1. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100166 (T084)
Activity Description: Storage of Organic Liquids

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
above ground internal floating roof tank (452,096 gallons)	OAC rule 3745-21-09(L)	see A.I.2.a through A.I.2.c, A.1.2.j and A.III.1
	40 CFR 60 Subpart Ka	see A.1.2.k
	40 CFR 60.112a	see A.I.2.d
	40 CFR 60.115a	see A.III.2 through A.III.5
	40 CFR 61 Subpart Y	see A.1.2.k
	40 CFR 61.271	see A.I.2.e and A.I.2.f
	40 CFR 61.272	see A.II.1, A.III.6 through A.III.8, and A.IV.1
	40 CFR 61.274	see A.IV.2
	40 CFR 61.275	see A.IV.3 through A.IV.5
	40 CFR 61.276	see A.III.9 and A.III.10
	40 CFR 63 Subpart CC	see A.1.2.m

40 CFR 63.642(e)	see A.III.11
40 CFR 63.646	see A.II.2, and shall comply with 40 CFR 63.119 through 63.121
40 CFR 63 Subpart G	see A.1.2.l
40 CFR 63.119(a)(1)	comply with 40 CFR 63.119 (b), (c), (d), (e), or (f)
40 CFR 63.119(b)	see A.I.2.g through A.I.2.j
40 CFR 63.120(a)	see A.III.12 through A.III.18

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 in the closed position at all times, except when in actual use for tank gauging or sampling.

2.d The permittee of each storage vessel which contains a petroleum liquid which, as stored, has a true vapor pressure equal to or greater than 10.3 kPa (1.5 psia) but not greater than 76.6 kPa (11.1 psia) shall equip the storage vessel with the following:

A fixed roof with an internal floating type cover equipped with a continuous closure device between the tank wall and the cover edge. The cover is to be floating at all times, (i.e., off the leg supports) except during initial fill and when the tank is completely emptied and subsequently refilled. The process of emptying and refilling when the cover is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. Each opening in the cover except for automatic bleeder vents and the rim space vents is to provide a projection below the liquid surface. Each opening in the cover except for automatic bleeder vents, rim space vents, stub drains and leg sleeves is to be equipped with a cover, seal, or lid which 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 cover is floating except when the cover is being floated off or is being landed on the leg supports. Rim vents are to be set to open only when the cover is being floated off the leg supports or at the manufacturer's recommended setting.

2.e If an existing storage vessel had an internal floating roof with a continuous seal as of July 28, 1988, the requirements listed below do not have to be met until the first time after September 14, 1989, the vessel is emptied and degassed or September 14, 1999, whichever occurs first,

i. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted.

ii. Each penetration of the internal floating roof for the purposes of sampling shall be a sample well. Each sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

iii. Each automatic bleeder vent shall be gasketed.

iv. Rim space vents shall be equipped with a gasket.

v. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

vi. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

2.f Each cover or lid on any opening in the internal floating roof shall be closed (i.e., no visible gaps), except when a device is in actual use. Covers on each access hatch and each automatic gauge float well which are equipped with bolts shall be bolted when they are not in use.

2.g 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 in the following:

i. During the initial fill.

ii. After the vessel has been completely emptied and degassed.

iii. When the vessel is completely emptied before being subsequently refilled.

2.h 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 A.I.2.i, the closure device shall consist of one of the devices listed in the following:

i. A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel or waste management unit and the floating roof. The seal is mounted continuously around the circumference of the vessel or unit.

ii. A metallic shoe seal or mechanical shoe seal means metal sheets that are held vertically against the wall of the storage vessel by springs, weighted levers, or other mechanisms and connected to the floating roof by braces or other means. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

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.

2.i If the internal floating roof is equipped with a vapor-mounted seal as of December 31, 1992, the requirement for one of the seal options specified in A.I.2.h does not apply until the earlier of the dates specified in the following:

i. The next time the storage vessel is emptied and degassed.

ii. No later than 10 years after April 22, 1994.

2.j 40 CFR 63 Subpart CC regulations overlap with those of OAC rule 3745-21-09(L).

2.k 40 CFR 61 Subpart Y regulations overlap with those of 40 CFR 60 Subpart Ka.

2.l 40 CFR 61 Subpart Y regulations overlap with those of 40 CFR 63 Subpart G.

2.m 40 CFR 63 Subpart CC regulations overlap with those of OAC rule 3745-21-09(L).

2.o The storage tank was installed in 1983 with no modifications, and stores benzene with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. If the internal 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 surfaces 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 refilling the storage vessel with benzene.

2. 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.

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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.

Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

ii. For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(1) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(2) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(1) May be obtained from standard reference texts, or

(2) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or

(3) Measured by an appropriate method approved by the Administrator; or

(4) Calculated by an appropriate method approved by the Administrator.

2. Except as provided in A.III.5, the permittee shall maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period.

3. Available data on the typical Reid vapor pressure and the maximum expected storage temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517, unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

4. The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa (2.0 psia) or whose physical properties preclude determination by the recommended method is to be determined from available data and recorded if the estimated true vapor pressure is greater than 6.9 kPa (1.0 psia).

5. The following are exempt from the requirements of A.III.2 through A.III.4: each permittee of each storage vessel storing a petroleum liquid with a Reid vapor pressure of less than 6.9 kPa (1.0 psia) provided the maximum true vapor pressure does not exceed 6.9 kPa (1.0 psia).

6. After installing the control equipment required to comply A.I.2.e and A.I.2.f, visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with benzene. If there are holes, tears or other openings in the primary seal, the secondary seal, or the seal fabric, or defects in the internal floating roof, the permittee shall repair the items before filling the storage vessel.

7. Visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) 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 September 14, 1989. If the internal floating roof is not resting on the surface of the benzene liquid inside the storage vessel, or there is liquid on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, an extension of up to 30 additional days may be requested from the Administrator in the inspection report required in A.IV.3. Such a request for an extension must document that alternate storage capacity is unavailable and specify a

schedule of actions the company will take that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

8. Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspections as specified in A.III.7.

9. Each permittee shall keep copies of all the reports and records required by A.III.6 through A.III.8 for at least 2 years, except as specified in A.III.10.

10. Each permittee with a storage vessel, including any vessel which has a design storage capacity less than 38 cubic meters (10,000 gallons), 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 is in operation.

11. Each 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.

12. 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 A.III.13 and A.III.14.

13. For vessels equipped with a single-seal system, the permittee shall perform the inspections specified in the following:

    a. 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 (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first).

    b. Visually inspect the internal floating roof, the seal, gaskets, slotted membranes, and sleeve seals (if any) each time the storage vessel is emptied and degassed, and at least once every 10 years after the compliance date (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first).

14. For vessels equipped with a double-seal system as specified in A.I.2.h.iii, the permittee shall perform either the inspection required in A.III.14.a or the inspections required in A.III.14.b and A.III.14.c.

a. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time the storage vessel is emptied and degassed and at least once every 5 years after the compliance date (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first); or

b. 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 (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first), and

c. Visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time the vessel is emptied and degassed and at least once every 10 years after the compliance date (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first).

15. If during the inspections required by A.III.13.a or A.III.13.b, 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 A.III.13.a or A.III.13.b 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.

16. Except as provided in A.III.17, for all the inspections required by A.III.13.b, A.III.14.a, and A.III.14.c, the permittee shall notify the Administrator in writing at least 30 calendar days prior to the refilling of each storage vessel to afford the Administrator the opportunity to have an observer present.

17. If the inspection required by A.III.13.b, A.III.14.a, and A.III.14.c is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel, the permittee shall notify the Administrator at least 7 calendar days prior to the refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, the notification including the written documentation may be made in writing and sent so that it is received by the Administrator at least 7 calendar days prior to refilling.

18. If during the inspections required by A.III.13.b, A.III.14.a, and A.III.14.c, 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; 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 refilling the storage vessel with organic HAP.

IV Reporting Requirements

1. For all the inspections required by A.III.6 and A.III.8, the permittee shall notify the Administrator in writing at least 30 days prior to the refilling of each storage vessel to afford the Administrator the opportunity to have an observer present. If the inspection required by A.III.8 is not planned and the permittee could not have known about the inspection 30 days in advance of refilling the vessel, 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. Alternatively, the 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 refilling.

2. The permittee shall submit an initial report describing the controls which will be applied to meet the equipment requirements in A.I.2.e and A.I.2.f. For an existing storage vessel or a new storage vessel for which construction and operation commenced prior to September 14, 1989, this report shall be submitted within 90 days of September 14, 1989, and can be combined with the source report, which should include the following:

2.a Name and address of the permittee.

2.b The location of the source.

2.c The type of hazardous pollutants emitted by the stationary source.

2.d A brief description of the nature, size, design, and method of operation of the stationary source including the operating design capacity of the source. Identify each point of emission for each hazardous pollutant.

2.e The average weight per month of the hazardous materials being processed by the source, over the last 12 months preceding the date of the report.

2.f A description of the existing control equipment for each emission point including--

i. Each control device for each hazardous pollutant; and

ii. Estimated control efficiency (percent) for each control device.

2.g A statement by the permittee of the source as to whether the source can comply with the standards.

3. The permittee shall submit a report describing the results of each inspection conducted in accordance with A.III.6 through A.III.8. For vessels for which annual inspections are required under A.III.7, the first report is to be submitted no more than 12 months after the initial report submitted in accordance with A.IV.2, and each report is to be submitted within 60 days of each annual inspection.

3.a Each report shall include the date of the inspection of each storage vessel and identify each storage vessel in which:

i. The internal floating roof is not resting on the surface of the benzene liquid inside the storage vessel, or there is liquid on the roof, or the seal is detached from the internal floating roof, or there are holes, tears or other openings in the seal or seal fabric; or

ii. There are visible gaps between the seal and the wall of the storage vessel.

3.b Where an annual report identifies any condition in A.IV.3.a the annual report shall describe the nature of the defect, the date the storage vessel was emptied, and the nature of an date the repair was made, except as provided in A.IV.3.c.

3.c If an extension is requested in an annual periodic report in accordance with A.III.7, a supplemental periodic report shall be submitted within 15 days of repair. The supplemental periodic report shall identify the vessel and describe the date the storage vessel was emptied and the nature of and date the repair was made.

4. The permittee shall submit a report describing the results of each inspection conducted in accordance with A.III.8.

4.a The report is to be submitted within 60 days of conducting each inspection required by A.III.8.

4.b Each report shall identify each storage vessel in which the permittee finds that the internal floating roof has defects, 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, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area. The report shall also describe the nature of the defect, the date the storage vessel was emptied, and the nature of and date the repair was made.

5. Any permittee of an existing storage vessel which had an internal floating roof with a continuous seal as of July 28, 1988, and which seeks to comply with the requirements of A.I.2.e during the first time after September 14, 1989, when the vessel is emptied and degassed but no later than 10 years from September 14, 1989, shall notify the Administrator 30 days prior to the completion of the installation of such controls and the date of refilling of the vessel so the Administrator has an opportunity to have an observer present to inspect the storage vessel before it is refilled. This report can be combined with the one required by A.IV.4.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100167 (T085)
Activity Description: Storage of Organic Liquids

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
above ground internal floating roof tank (452,096 gallons)	OAC rule 3745-21-09 (L)	see A.I.2.a through A.I.2.c, A.1.2.j and A.III.1
	40 CFR 60 Subpart Ka	see A.1.2.k
	40 CFR 60.112a	see A.I.2.d
	40 CFR 60.115a	see A.III.2 through A.III.5
	40 CFR 61 Subpart Y	see A.1.2.k
	40 CFR 61.271	see A.I.2.e and A.I.2.f
	40 CFR 61.272	see A.II.1, A.III.6 through A.III.8, and A.IV.1
	40 CFR 61.274	see A.IV.2
	40 CFR 61.275	see A.IV.3 through A.IV.5
	40 CFR 61.276	see A.III.9 and A.III.10

40 CFR 63 Subpart CC	see A.1.2.m
40 CFR 63.642(e)	see A.III.11
40 CFR 63.646	see A.II.2, and shall comply with 40 CFR 63.119 through 63.121
40 CFR 63 Subpart G	see A.1.2.l
40 CFR 63.119(a)(1)	comply with 40 CFR 63.119 (b), (c), (d), (e), or (f)
40 CFR 63.119(b)	see A.I.2.g through A.I.2.j
40 CFR 63.120(a)	see A.III.12 through A.III.18

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 in the closed position at all times, except when in actual use for tank gauging or sampling.

2.d The permittee of each storage vessel which contains a petroleum liquid which, as stored, has a true vapor pressure equal to or greater than 10.3 kPa (1.5 psia) but not greater than 76.6 kPa (11.1 psia) shall equip the storage vessel with the following:

A fixed roof with an internal floating type cover equipped with a continuous closure device between the tank wall and the cover edge. The cover is to be floating at all times, (i.e., off the leg supports) except during initial fill and when the tank is completely emptied and subsequently refilled. The process of emptying and refilling when the cover is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. Each opening in the cover except for automatic bleeder vents and the rim space vents is to provide a projection below the liquid surface. Each opening in the cover except for automatic bleeder vents, rim space vents, stub drains and leg sleeves is to be equipped

with a cover, seal, or lid which 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 cover is floating except when the cover is being floated off or is being landed on the leg supports. Rim vents are to be set to open only when the cover is being floated off the leg supports or at the manufacturer's recommended setting.

2.e If an existing storage vessel had an internal floating roof with a continuous seal as of July 28, 1988, the requirements listed below do not have to be met until the first time after September 14, 1989, the vessel is emptied and degassed or September 14, 1999, whichever occurs first,

i. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted.

ii. Each penetration of the internal floating roof for the purposes of sampling shall be a sample well. Each sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

iii. Each automatic bleeder vent shall be gasketed.

iv. Rim space vents shall be equipped with a gasket.

v. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

vi. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

2.f Each cover or lid on any opening in the internal floating roof shall be closed (i.e., no visible gaps), except when a device is in actual use. Covers on each access hatch and each automatic gauge float well which are equipped with bolts shall be bolted when they are not in use.

2.g 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 in the following:

i. During the initial fill.

ii. After the vessel has been completely emptied and degassed.

iii. When the vessel is completely emptied before being subsequently refilled.

2.h 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 A.I.2.i, the closure device shall consist of one of the devices listed in the following:

i. A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel or waste management unit and the floating roof. The seal is mounted continuously around the circumference of the vessel or unit.

ii. A metallic shoe seal or mechanical shoe seal means metal sheets that are held vertically against the wall of the storage vessel by springs, weighted levers, or other mechanisms and connected to the floating roof by braces or other means. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

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.

2.i If the internal floating roof is equipped with a vapor-mounted seal as of December 31, 1992, the requirement for one of the seal options specified in A.I.2.h does not apply until the earlier of the dates specified in the following:

i. The next time the storage vessel is emptied and degassed.

ii. No later than 10 years after April 22, 1994.

2.j 40 CFR 63 Subpart CC regulations overlap with those of OAC rule 3745-21-09(L).

2.k 40 CFR 61 Subpart Y regulations overlap with those of 40 CFR 60 Subpart Ka.

2.l 40 CFR 61 Subpart Y regulations overlap with those of 40 CFR 63 Subpart G.

2.m 40 CFR 63 Subpart CC regulations overlap with those of OAC rule 3745-21-09(L).

2.o The storage tank was installed in 1983 with no modifications, and stores benzene with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. If the internal 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 surfaces 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 refilling the storage vessel with benzene.

2. 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.

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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.

Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

ii. For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(1) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see

Sec. 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(2) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(1) May be obtained from standard reference texts, or

(2) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or

(3) Measured by an appropriate method approved by the Administrator; or

(4) Calculated by an appropriate method approved by the Administrator.

2. Except as provided in A.III.5, the permittee shall maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period.

3. Available data on the typical Reid vapor pressure and the maximum expected storage temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517, unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

4. The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa (2.0 psia) or whose physical properties preclude determination by the recommended method is to be determined from available data and recorded if the estimated true vapor pressure is greater than 6.9 kPa (1.0 psia).

5. The following are exempt from the requirements of A.III.2 through A.III.4: each permittee of each storage vessel storing a petroleum liquid with a Reid vapor pressure of less than 6.9 kPa (1.0 psia) provided the maximum true vapor pressure does not exceed 6.9 kPa (1.0 psia).

6. After installing the control equipment required to comply A.I.2.e and A.I.2.f, visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with benzene. If there are holes, tears or other openings in the primary seal, the secondary seal, or the seal fabric, or defects in the internal floating roof, the permittee shall repair the items before filling the storage vessel.

7. Visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) 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 September 14, 1989. If the internal floating roof is not resting on the surface of the benzene liquid inside the storage vessel, or there is liquid on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, an extension of up to 30 additional days may be requested from the Administrator in the inspection report required in A.IV.3. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

8. Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspections as specified in A.III.7.

9. Each permittee shall keep copies of all the reports and records required by A.III.6 through A.III.8 for at least 2 years, except as specified in A.III.10.

10. Each permittee with a storage vessel, including any vessel which has a design storage capacity less than 38 cubic meters (10,000 gallons), 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 is in operation.

11. Each 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.

12. 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 A.III.13 and A.III.14.

13. For vessels equipped with a single-seal system, the permittee shall perform the inspections specified in the following:

    a. 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 (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first).

b. Visually inspect the internal floating roof, the seal, gaskets, slotted membranes, and sleeve seals (if any) each time the storage vessel is emptied and degassed, and at least once every 10 years after the compliance date (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first).

14. For vessels equipped with a double-seal system as specified in A.I.2.h.iii, the permittee shall perform either the inspection required in A.III.14.a or the inspections required in A.III.14.b and A.III.14.c.

a. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time the storage vessel is emptied and degassed and at least once every 5 years after the compliance date (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first); or

b. 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 (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first), and

c. Visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time the vessel is emptied and degassed and at least once every 10 years after the compliance date (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first).

15. If during the inspections required by A.III.13.a or A.III.13.b, 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 A.III.13.a or A.III.13.b 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.

16. Except as provided in A.III.17, for all the inspections required by A.III.13.b, A.III.14.a, and A.III.14.c, the permittee shall notify the Administrator in writing at least 30 calendar days prior to the refilling of each storage vessel to afford the Administrator the opportunity to have an observer present.

17. If the inspection required by A.III.13.b, A.III.14.a, and A.III.14.c is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel, the permittee shall notify the Administrator at least 7 calendar days prior to the refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, the notification including the written documentation may be made in writing and sent so that it is received by the Administrator at least 7 calendar days prior to refilling.

18. If during the inspections required by A.III.13.b, A.III.14.a, and A.III.14.c, 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; 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 refilling the storage vessel with organic HAP.

IV Reporting Requirements

1. For all the inspections required by A.III.6 and A.III.8, the permittee shall notify the Administrator in writing at least 30 days prior to the refilling of each storage vessel to afford the Administrator the opportunity to have an observer present. If the inspection required by A.III.8 is not planned and the permittee could not have known about the inspection 30 days in advance of refilling the vessel, 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. Alternatively, the 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 refilling.

2. The permittee shall submit an initial report describing the controls which will be applied to meet the equipment requirements in A.I.2.e and A.I.2.f. For an existing storage vessel or a new storage vessel for which construction and operation commenced prior to September 14, 1989, this report shall be submitted within 90 days of September 14, 1989, and can be combined with the source report, which should include the following:

2.a Name and address of the permittee.

2.b The location of the source.

2.c The type of hazardous pollutants emitted by the stationary source.

2.d A brief description of the nature, size, design, and method of operation of the stationary source including the operating design capacity of the source. Identify each point of emission for each hazardous pollutant.

2.e The average weight per month of the hazardous materials being processed by the source, over the last 12 months preceding the date of the report.

2.f A description of the existing control equipment for each emission point including--

i. Each control device for each hazardous pollutant; and

ii. Estimated control efficiency (percent) for each control device.

2.g A statement by the permittee of the source as to whether the source can comply with the standards.

3. The permittee shall submit a report describing the results of each inspection conducted in accordance with A.III.6 through A.III.8. For vessels for which annual inspections are required under A.III.7, the first report is to be submitted no more than 12 months after the initial report submitted in accordance with A.IV.2, and each report is to be submitted within 60 days of each annual inspection.

3.a Each report shall include the date of the inspection of each storage vessel and identify each storage vessel in which:

i. The internal floating roof is not resting on the surface of the benzene liquid inside the storage vessel, or there is liquid on the roof, or the seal is detached from the internal floating roof, or there are holes, tears or other openings in the seal or seal fabric; or

ii. There are visible gaps between the seal and the wall of the storage vessel.

3.b Where an annual report identifies any condition in A.IV.3.a the annual report shall describe the nature of the defect, the date the storage vessel was emptied, and the nature of an date the repair was made, except as provided in A.IV.3.c.

3.c If an extension is requested in an annual periodic report in accordance with A.III.7, a supplemental periodic report shall be submitted within 15 days of repair. The supplemental periodic report shall identify the vessel and describe the date the storage vessel was emptied and the nature of and date the repair was made.

4. The permittee shall submit a report describing the results of each inspection conducted in accordance with A.III.8.

4.a The report is to be submitted within 60 days of conducting each inspection required by A.III.8.

4.b Each report shall identify each storage vessel in which the permittee finds that the internal floating roof has defects, 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, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area. The report shall also describe the nature of the defect, the date the storage vessel was emptied, and the nature of and date the repair was made.

5. Any permittee of an existing storage vessel which had an internal floating roof with a continuous seal as of July 28, 1988, and which seeks to comply with the requirements of A.I.2.e during the first time after September 14, 1989, when the vessel is emptied and degassed but no later than 10 years from September 14, 1989, shall notify the Administrator 30 days prior to the completion of the installation of such controls and the date of refilling of the vessel so the Administrator has an opportunity to have an observer present to inspect the storage vessel before it is refilled. This report can be combined with the one required by A.IV.4.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100168 (T086)
Activity Description: Storage of Organic Liquids

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
above ground internal floating roof tank (1,955,262 gallons)	OAC rule 3745-21-09 (L)	see A.I.2.a through A.I.2.c, A.1.2.j and A.III.1
	40 CFR 60 Subpart Ka	see A.1.2.k
	40 CFR 60.112a	see A.I.2.d
	40 CFR 60.115a	see A.III.2 through A.III.5
	40 CFR 61 Subpart Y	see A.1.2.k
	40 CFR 61.271	see A.I.2.e and A.I.2.f
	40 CFR 61.272	see A.II.1, A.III.6 through A.III.8, and A.IV.1
	40 CFR 61.274	see A.IV.2
	40 CFR 61.275	see A.IV.3 through A.IV.5
	40 CFR 61.276	see A.III.9 and A.III.10

40 CFR 63 Subpart CC	see A.1.2.m
40 CFR 63.642(e)	see A.III.11
40 CFR 63.646	see A.II.2, and shall comply with 40 CFR 63.119 through 63.121
40 CFR 63 Subpart G	see A.1.2.l
40 CFR 63.119(a)(1)	comply with 40 CFR 63.119 (b), (c), (d), (e), or (f)
40 CFR 63.119(b)	see A.I.2.g through A.I.2.j
40 CFR 63.120(a)	see A.III.12 through A.III.18

. The storage tank was installed in 1983 with no modifications, and stores benzene with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

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 in the closed position at all times, except when in actual use for tank gauging or sampling.

2.d The permittee of each storage vessel which contains a petroleum liquid which, as stored, has a true vapor pressure equal to or greater than 10.3 kPa (1.5 psia) but not greater than 76.6 kPa (11.1 psia) shall equip the storage vessel with the following:

A fixed roof with an internal floating type cover equipped with a continuous closure device between the tank wall and the cover edge. The cover is to be floating at all times, (i.e., off the leg supports) except during initial fill and when the tank is completely

emptied and subsequently refilled. The process of emptying and refilling when the cover is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. Each opening in the cover except for automatic bleeder vents and the rim space vents is to provide a projection below the liquid surface. Each opening in the cover except for automatic bleeder vents, rim space vents, stub drains and leg sleeves is to be equipped with a cover, seal, or lid which 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 cover is floating except when the cover is being floated off or is being landed on the leg supports. Rim vents are to be set to open only when the cover is being floated off the leg supports or at the manufacturer's recommended setting.

2.e If an existing storage vessel had an internal floating roof with a continuous seal as of July 28, 1988, the requirements listed below do not have to be met until the first time after September 14, 1989, the vessel is emptied and degassed or September 14, 1999, whichever occurs first,

i. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted.

ii. Each penetration of the internal floating roof for the purposes of sampling shall be a sample well. Each sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

iii. Each automatic bleeder vent shall be gasketed.

iv. Rim space vents shall be equipped with a gasket.

v. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

vi. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

2.f Each cover or lid on any opening in the internal floating roof shall be closed (i.e., no visible gaps), except when a device is in actual use. Covers on each access hatch and each automatic gauge float well which are equipped with bolts shall be bolted when they are not in use.

2.g 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 in the following:

i. During the initial fill.

ii. After the vessel has been completely emptied and degassed.

iii. When the vessel is completely emptied before being subsequently refilled.

2.h 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 A.I.2.i, the closure device shall consist of one of the devices listed in the following:

i. A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel or waste management unit and the floating roof. The seal is mounted continuously around the circumference of the vessel or unit.

ii. A metallic shoe seal or mechanical shoe seal means metal sheets that are held vertically against the wall of the storage vessel by springs, weighted levers, or other mechanisms and connected to the floating roof by braces or other means. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

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.

2.i If the internal floating roof is equipped with a vapor-mounted seal as of December 31, 1992, the requirement for one of the seal options specified in A.I.2.h does not apply until the earlier of the dates specified in the following:

i. The next time the storage vessel is emptied and degassed.

ii. No later than 10 years after April 22, 1994.

2.j 40 CFR 63 Subpart CC regulations overlap with those of OAC rule 3745-21-09(L).

2.k 40 CFR 61 Subpart Y regulations overlap with those of 40 CFR 60 Subpart Ka.

2.l 40 CFR 61 Subpart Y regulations overlap with those of 40 CFR 63 Subpart G.

2.m 40 CFR 63 Subpart CC regulations overlap with those of OAC rule 3745-21-09(L).

II Operational Restrictions

1. If the internal 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 surfaces 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 refilling the storage vessel with benzene.

2. 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.

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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.

Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

ii. For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(1) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(2) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(1) May be obtained from standard reference texts, or

(2) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or

(3) Measured by an appropriate method approved by the Administrator; or

(4) Calculated by an appropriate method approved by the Administrator.

2. Except as provided in A.III.5, the permittee shall maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period.

3. Available data on the typical Reid vapor pressure and the maximum expected storage temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517, unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

4. The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa (2.0 psia) or whose physical properties preclude determination by the recommended method is to be determined from available data and recorded if the estimated true vapor pressure is greater than 6.9 kPa (1.0 psia).

5. The following are exempt from the requirements of A.III.2 through A.III.4: each permittee of each storage vessel storing a petroleum liquid with a Reid vapor pressure of less than 6.9 kPa (1.0 psia) provided the maximum true vapor pressure does not exceed 6.9 kPa (1.0 psia).

6. After installing the control equipment required to comply A.I.2.e and A.I.2.f, visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with benzene. If there are holes, tears or other openings in the primary seal, the secondary seal, or the seal fabric, or defects in the internal floating roof, the permittee shall repair the items before filling the storage vessel.

7. Visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) 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 September 14, 1989. If the internal floating roof

is not resting on the surface of the benzene liquid inside the storage vessel, or there is liquid on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, an extension of up to 30 additional days may be requested from the Administrator in the inspection report required in A.IV.3. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

8. Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspections as specified in A.III.7.

9. Each permittee shall keep copies of all the reports and records required by A.III.6 through A.III.8 for at least 2 years, except as specified in A.III.10.

10. Each permittee with a storage vessel, including any vessel which has a design storage capacity less than 38 cubic meters (10,000 gallons), 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 is in operation.

11. Each 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.

12. 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 A.III.13 and A.III.14.

13. For vessels equipped with a single-seal system, the permittee shall perform the inspections specified in the following:

    a. 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 (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first).

    b. Visually inspect the internal floating roof, the seal, gaskets, slotted membranes, and sleeve seals (if any) each time the storage vessel is emptied and degassed, and at least

once every 10 years after the compliance date (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first).

14. For vessels equipped with a double-seal system as specified in A.I.2.h.iii, the permittee shall perform either the inspection required in A.III.14.a or the inspections required in A.III.14.b and A.III.14.c.

    a. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time the storage vessel is emptied and degassed and at least once every 5 years after the compliance date (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first); or

    b. 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 (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first), and

    c. Visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time the vessel is emptied and degassed and at least once every 10 years after the compliance date (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first).

15. If during the inspections required by A.III.13.a or A.III.13.b, 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 A.III.13.a or A.III.13.b 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.

16. Except as provided in A.III.17, for all the inspections required by A.III.13.b, A.III.14.a, and A.III.14.c, the permittee shall notify the Administrator in writing at least 30 calendar days prior to the refilling of each storage vessel to afford the Administrator the opportunity to have an observer present.

17. If the inspection required by A.III.13.b, A.III.14.a, and A.III.14.c is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel, the permittee shall notify the Administrator at least 7 calendar days prior to the refilling of the storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, the notification including the written documentation may be made in writing and sent so that it is received by the Administrator at least 7 calendar days prior to refilling.

18. If during the inspections required by A.III.13.b, A.III.14.a, and A.III.14.c, 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; 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 refilling the storage vessel with organic HAP.

IV Reporting Requirements

1. For all the inspections required by A.III.6 and A.III.8, the permittee shall notify the Administrator in writing at least 30 days prior to the refilling of each storage vessel to afford the Administrator the opportunity to have an observer present. If the inspection required by A.III.8 is not planned and the permittee could not have known about the inspection 30 days in advance of refilling the vessel, 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. Alternatively, the 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 refilling.

2. The permittee shall submit an initial report describing the controls which will be applied to meet the equipment requirements in A.I.2.e and A.I.2.f. For an existing storage vessel or a new storage vessel for which construction and operation commenced prior to September 14, 1989, this report shall be submitted within 90 days of September 14, 1989, and can be combined with the source report, which should include the following:

2.a Name and address of the permittee.

2.b The location of the source.

2.c The type of hazardous pollutants emitted by the stationary source.

2.d A brief description of the nature, size, design, and method of operation of the stationary source including the operating design capacity of the source. Identify each point of emission for each hazardous pollutant.

2.e The average weight per month of the hazardous materials being processed by the source, over the last 12 months preceding the date of the report.

2.f A description of the existing control equipment for each emission point including--

i. Each control device for each hazardous pollutant; and

ii. Estimated control efficiency (percent) for each control device.

2.g A statement by the permittee of the source as to whether the source can comply with the standards.

3. The permittee shall submit a report describing the results of each inspection conducted in accordance with A.III.6 through A.III.8. For vessels for which annual inspections are required under A.III.7, the first report is to be submitted no more than 12 months after the initial report submitted in accordance with A.IV.2, and each report is to be submitted within 60 days of each annual inspection.

3.a Each report shall include the date of the inspection of each storage vessel and identify each storage vessel in which:

i. The internal floating roof is not resting on the surface of the benzene liquid inside the storage vessel, or there is liquid on the roof, or the seal is detached from the internal floating roof, or there are holes, tears or other openings in the seal or seal fabric; or

ii. There are visible gaps between the seal and the wall of the storage vessel.

3.b Where an annual report identifies any condition in A.IV.3.a the annual report shall describe the nature of the defect, the date the storage vessel was emptied, and the nature of an date the repair was made, except as provided in A.IV.3.c.

3.c If an extension is requested in an annual periodic report in accordance with A.III.7, a supplemental periodic report shall be submitted within 15 days of repair. The supplemental periodic report shall identify the vessel and describe the date the storage vessel was emptied and the nature of and date the repair was made.

4. The permittee shall submit a report describing the results of each inspection conducted in accordance with A.III.8.

4.a The report is to be submitted within 60 days of conducting each inspection required by A.III.8.

4.b Each report shall identify each storage vessel in which the permittee finds that the internal floating roof has defects, 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, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area. The report shall also describe the nature of the defect, the date the storage vessel was emptied, and the nature of and date the repair was made.

5. Any permittee of an existing storage vessel which had an internal floating roof with a continuous seal as of July 28, 1988, and which seeks to comply with the requirements of A.I.2.e during the first time after September 14, 1989, when the vessel is emptied and degassed but no later than 10 years from September 14, 1989, shall notify the Administrator 30 days prior to the completion of the installation of such controls and the date of refilling of the vessel so the Administrator has an opportunity to have an observer present to inspect the storage vessel before it is refilled. This report can be combined with the one required by A.IV.4.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100165 (T087)
Activity Description: Storage of Organic Liquids

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
above ground internal floating roof tank (3,696,667 gallons)	OAC rule 3745-21-09 (L)	see A.I.2.a through A.I.2.c, A.1.2.j and A.III.1
	40 CFR 60 Subpart Ka	see A.1.2.k
	40 CFR 60.112a	see A.I.2.d
	40 CFR 60.115a	see A.III.2 through A.III.5
	40 CFR 61 Subpart Y	see A.1.2.k
	40 CFR 61.271	see A.I.2.e and A.I.2.f
	40 CFR 61.272	see A.II.1, A.III.6 through A.III.8, and A.IV.1
	40 CFR 61.274	see A.IV.2
	40 CFR 61.275	see A.IV.3 through A.IV.5
	40 CFR 61.276	see A.III.9 and A.III.10

40 CFR 63 Subpart CC	see A.1.2.m
40 CFR 63.642(e)	see A.III.11
40 CFR 63.646	see A.II.2, and shall comply with 40 CFR 63.119 through 63.121
40 CFR 63 Subpart G	see A.1.2.l
40 CFR 63.119(a)(1)	comply with 40 CFR 63.119 (b), (c), (d), (e), or (f)
40 CFR 63.119(b)	see A.I.2.g through A.I.2.j
40 CFR 63.120(a)	see A.III.12 through A.III.18

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 in the closed position at all times, except when in actual use for tank gauging or sampling.

2.d The permittee of each storage vessel which contains a petroleum liquid which, as stored, has a true vapor pressure equal to or greater than 10.3 kPa (1.5 psia) but not greater than 76.6 kPa (11.1 psia) shall equip the storage vessel with the following:

A fixed roof with an internal floating type cover equipped with a continuous closure device between the tank wall and the cover edge. The cover is to be floating at all times, (i.e., off the leg supports) except during initial fill and when the tank is completely emptied and subsequently refilled. The process of emptying and refilling when the cover is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. Each opening in the cover except for automatic bleeder vents and the rim space vents is to provide a projection below the liquid surface. Each opening in the cover except for automatic bleeder vents, rim space vents, stub drains and leg sleeves is to be equipped with a cover, seal, or lid which 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 cover is floating except when the cover is being floated off or

is being landed on the leg supports. Rim vents are to be set to open only when the cover is being floated off the leg supports or at the manufacturer's recommended setting.

2.e If an existing storage vessel had an internal floating roof with a continuous seal as of July 28, 1988, the requirements listed below do not have to be met until the first time after September 14, 1989, the vessel is emptied and degassed or September 14, 1999, whichever occurs first,

i. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted.

ii. Each penetration of the internal floating roof for the purposes of sampling shall be a sample well. Each sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

iii. Each automatic bleeder vent shall be gasketed.

iv. Rim space vents shall be equipped with a gasket.

v. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

vi. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

2.f Each cover or lid on any opening in the internal floating roof shall be closed (i.e., no visible gaps), except when a device is in actual use. Covers on each access hatch and each automatic gauge float well which are equipped with bolts shall be bolted when they are not in use.

2.g 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 in the following:

i. During the initial fill.

ii. After the vessel has been completely emptied and degassed.

iii. When the vessel is completely emptied before being subsequently refilled.

2.h 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 A.I.2.i, the closure device shall consist of one of the devices listed in the following:

i. A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel or waste management unit and the floating roof. The seal is mounted continuously around the circumference of the vessel or unit.

ii. A metallic shoe seal or mechanical shoe seal means metal sheets that are held vertically against the wall of the storage vessel by springs, weighted levers, or other mechanisms and connected to the floating roof by braces or other means. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

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.

2.i If the internal floating roof is equipped with a vapor-mounted seal as of December 31, 1992, the requirement for one of the seal options specified in A.I.2.h does not apply until the earlier of the dates specified in the following:

i. The next time the storage vessel is emptied and degassed.

ii. No later than 10 years after April 22, 1994.

2.j 40 CFR 63 Subpart CC regulations overlap with those of OAC rule 3745-21-09(L).

2.k 40 CFR 61 Subpart Y regulations overlap with those of 40 CFR 60 Subpart Ka.

2.l 40 CFR 61 Subpart Y regulations overlap with those of 40 CFR 63 Subpart G.

2.m 40 CFR 63 Subpart CC regulations overlap with those of OAC rule 3745-21-09(L).

2.o The storage tank was installed in 1983 with no modifications, and stores benzene with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. If the internal 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 surfaces 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 refilling the storage vessel with benzene.

2. 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.

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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.

Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

ii. For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(1) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(2) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the

recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(1) May be obtained from standard reference texts, or

(2) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or

(3) Measured by an appropriate method approved by the Administrator; or

(4) Calculated by an appropriate method approved by the Administrator.

2. Except as provided in A.III.5, the permittee shall maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period.

3. Available data on the typical Reid vapor pressure and the maximum expected storage temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517, unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

4. The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa (2.0 psia) or whose physical properties preclude determination by the recommended method is to be determined from available data and recorded if the estimated true vapor pressure is greater than 6.9 kPa (1.0 psia).

5. The following are exempt from the requirements of A.III.2 through A.III.4: each permittee of each storage vessel storing a petroleum liquid with a Reid vapor pressure of less than 6.9 kPa (1.0 psia) provided the maximum true vapor pressure does not exceed 6.9 kPa (1.0 psia).

6. After installing the control equipment required to comply A.I.2.e and A.I.2.f, visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with benzene. If there are holes, tears or other openings in the primary seal, the secondary seal, or the seal fabric, or defects in the internal floating roof, the permittee shall repair the items before filling the storage vessel.

7. Visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) 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 September 14, 1989. If the internal floating roof is not resting on the surface of the benzene liquid inside the storage vessel, or there is liquid on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the permittee shall

repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, an extension of up to 30 additional days may be requested from the Administrator in the inspection report required in A.IV.3. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

8. Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspections as specified in A.III.7.

9. Each permittee shall keep copies of all the reports and records required by A.III.6 through A.III.8 for at least 2 years, except as specified in A.III.10.

10. Each permittee with a storage vessel, including any vessel which has a design storage capacity less than 38 cubic meters (10,000 gallons), 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 is in operation.

11. Each 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.

12. 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 A.III.13 and A.III.14.

13. For vessels equipped with a single-seal system, the permittee shall perform the inspections specified in the following:

    a. 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 (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first).

    b. Visually inspect the internal floating roof, the seal, gaskets, slotted membranes, and sleeve seals (if any) each time the storage vessel is emptied and degassed, and at least once every 10 years after the compliance date (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first).

14. For vessels equipped with a double-seal system as specified in A.I.2.h.iii, the permittee shall perform either the inspection required in A.III.14.a or the inspections required in A.III.14.b and A.III.14.c.

    a. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time the storage vessel is emptied and degassed and at least once every 5 years after the compliance date (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first); or

    b. 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 (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first), and

    c. Visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time the vessel is emptied and degassed and at least once every 10 years after the compliance date (compliance by the first degassing and cleaning activity after August 18, 1998 or by August 18, 2005, whichever is first).

15. If during the inspections required by A.III.13.a or A.III.13.b, 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 A.III.13.a or A.III.13.b 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.

16. Except as provided in A.III.17, for all the inspections required by A.III.13.b, A.III.14.a, and A.III.14.c, the permittee shall notify the Administrator in writing at least 30 calendar days prior to the refilling of each storage vessel to afford the Administrator the opportunity to have an observer present.

17. If the inspection required by A.III.13.b, A.III.14.a, and A.III.14.c is not planned and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel, the permittee shall notify the Administrator at least 7 calendar days prior to the refilling of the storage vessel. Notification may be made by telephone and immediately followed by written

documentation demonstrating why the inspection was unplanned. Alternatively, the notification including the written documentation may be made in writing and sent so that it is received by the Administrator at least 7 calendar days prior to refilling.

18. If during the inspections required by A.III.13.b, A.III.14.a, and A.III.14.c, 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; 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 refilling the storage vessel with organic HAP.

IV Reporting Requirements

1. For all the inspections required by A.III.6 and A.III.8, the permittee shall notify the Administrator in writing at least 30 days prior to the refilling of each storage vessel to afford the Administrator the opportunity to have an observer present. If the inspection required by A.III.8 is not planned and the permittee could not have known about the inspection 30 days in advance of refilling the vessel, 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. Alternatively, the 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 refilling.

2. The permittee shall submit an initial report describing the controls which will be applied to meet the equipment requirements in A.I.2.e and A.I.2.f. For an existing storage vessel or a new storage vessel for which construction and operation commenced prior to September 14, 1989, this report shall be submitted within 90 days of September 14, 1989, and can be combined with the source report, which should include the following:

2.a Name and address of the permittee.

2.b The location of the source.

2.c The type of hazardous pollutants emitted by the stationary source.

2.d A brief description of the nature, size, design, and method of operation of the stationary source including the operating design capacity of the source. Identify each point of emission for each hazardous pollutant.

2.e The average weight per month of the hazardous materials being processed by the source, over the last 12 months preceding the date of the report.

2.f A description of the existing control equipment for each emission point including--

i. Each control device for each hazardous pollutant; and

ii. Estimated control efficiency (percent) for each control device.

2.g A statement by the permittee of the source as to whether the source can comply with the standards.

3. The permittee shall submit a report describing the results of each inspection conducted in accordance with A.III.6 through A.III.8. For vessels for which annual inspections are required under A.III.7, the first report is to be submitted no more than 12 months after the initial report submitted in accordance with A.IV.2, and each report is to be submitted within 60 days of each annual inspection.

3.a Each report shall include the date of the inspection of each storage vessel and identify each storage vessel in which:

i. The internal floating roof is not resting on the surface of the benzene liquid inside the storage vessel, or there is liquid on the roof, or the seal is detached from the internal floating roof, or there are holes, tears or other openings in the seal or seal fabric; or

ii. There are visible gaps between the seal and the wall of the storage vessel.

3.b Where an annual report identifies any condition in A.IV.3.a the annual report shall describe the nature of the defect, the date the storage vessel was emptied, and the nature of an date the repair was made, except as provided in A.IV.3.c.

3.c If an extension is requested in an annual periodic report in accordance with A.III.7, a supplemental periodic report shall be submitted within 15 days of repair. The supplemental periodic report shall identify the vessel and describe the date the storage vessel was emptied and the nature of and date the repair was made.

4. The permittee shall submit a report describing the results of each inspection conducted in accordance with A.III.8.

4.a The report is to be submitted within 60 days of conducting each inspection required by A.III.8.

4.b Each report shall identify each storage vessel in which the permittee finds that the internal floating roof has defects, 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, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area. The report shall also describe the nature of the defect, the date the storage vessel was emptied, and the nature of and date the repair was made.

5. Any permittee of an existing storage vessel which had an internal floating roof with a continuous seal as of July 28, 1988, and which seeks to comply with the requirements of A.I.2.e during the first time after September 14, 1989, when the vessel is emptied and degassed but no later than 10 years from September 14, 1989, shall notify the Administrator 30 days prior to the completion of the installation of such controls and the date of refilling of the vessel so the Administrator has an opportunity to have an observer present to inspect the storage vessel before it is refilled. This report can be combined with the one required by A.IV.4.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100169 (T088)
Activity Description: Storage of Organic Liquids

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
above-ground external floating roof storage tank with a capacity of 1,479,936 gallons; welded shell construction, with a mechanical shoe primary seal, and a rim-mounted, flexible wiper secondary seal	OAC rule 3745-31-05	see A.I.2.l
	OAC rule 3745-21-09(Z)	The requirements established pursuant to this rule are equivalent to the requirements of 40 CFR 60.112a, 40 CFR 60.113a, 40 CFR 60.114a, and 40 CFR 60.115a (see A.III.1 through A.III.4, and A.IV.1)
	40 CFR Part 60, Subpart Ka:	
	40 CFR 60.112a(a)	see A.I.2.a through A.I.2.d
	40 CFR 60.113a	see A.IV.2 and A.V.1
	40 CFR 60.115a	see A.III.5 through A.III.8.
	40 CFR Part 63, Subpart CC:	
	40 CFR 63.642(e) and (f)	see A.IV.3.
	40 CFR 63.646	see A.II.1.

40 CFR Part 63, Subpart G:	The permittee shall comply with 40 CFR 63.119 through 63.121.
40 CFR 63.119(a)(1)	see A.I.2.e
40 CFR 63.119(c)	see A.I.2.f through A.I.2.h
40 CFR 63.120(b)	see A.I.2.i through A.I.2.j, A.III.9 through A.III.15, A.II.2 and A.II.3, and A.IV.4
40 CFR 63.121	see A.I.2.k

2. Additional Terms and Conditions

2.a The permittee shall equip the storage vessel with the following:

An external floating roof, consisting of a pontoon-type or double-deck-type cover that rests on the surface of the liquid contents and is equipped with a closure device between the tank wall and the roof edge. Except as provided in section A.I.2.b.iv, 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. The roof is to be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill and when the tank is completely emptied and subsequently refilled. The process of emptying and refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible.

i. The primary seal is to be either a metallic shoe seal, a liquid-mounted seal, or a vapor-mounted seal. Each seal is to meet the following requirements:

(1) The accumulated area of gaps between the tank wall and the metallic shoe seal or the liquid-mounted seal shall not exceed 212 cm squared per meter of tank diameter (10.0 inches squared per ft of tank diameter) and the width of any portion of any gap shall not exceed 3.81 cm (1 1/2 in).

(2) The accumulated area of gaps between the tank wall and the vapor-mounted seal shall not exceed 21.2 cm squared per meter of tank diameter (1.0 inch squared per ft of tank diameter) and the width of any portion of any gap shall not exceed 1.27 cm (1/2 in).

(3) One end of the metallic shoe is to extend into the stored liquid and the other end is to extend a minimum vertical distance of 61 cm (24 in) above the stored liquid surface.

(4) There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

2.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.I.2.b.ii.

ii. The accumulated area of gaps between the tank wall and the secondary seal used in combination with a metallic shoe or liquid-mounted primary seal shall not exceed 21.2 cm squared per meter of tank diameter (1.0 inch squared per ft. of tank diameter) and the width of any portion of any gap shall not exceed 1.27 cm (1/2 in.). There shall be no gaps between the tank wall and the secondary seal used in combination with a vapor-mounted primary seal.

iii. There are to be no holes, tears or other openings in the seal or seal fabric.

iv. The permittee is exempted from the requirements for secondary seals and the secondary seal gap criteria when performing gap measurements or inspections of the primary seal.

2.c Each opening in the roof except for automatic bleeder vents and rim space vents is to provide a projection below the liquid surface. Each opening in the roof except for automatic bleeder vents, rim space vents and leg sleeves is to be equipped with a cover, seal or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use or as described in section A.I.2.d. 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 legs supports or at the manufacturer's recommended setting.

2.d 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.

2.e The permittee shall reduce hazardous air pollutants emissions to the atmosphere either by operating and maintaining a fixed roof and internal floating roof, an external floating roof, an external floating roof converted to an internal floating roof, or a closed vent system and control device, or routing the emissions to a process or a fuel gas system in accordance with the requirements in sections A.I.2.f through A.I.2.h, or equivalent as provided in section A.I.2.k.

2.f Each 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 section A.I.2.f.iv, 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 section A.I.2.f.v, the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

iii. Except during the inspections required by this permit, 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 December 31, 1992, the requirement for a secondary seal in section A.I.2.f.i does not apply until the earlier of the following dates:

(1) the next time the storage vessel is emptied and degassed; or

(2) no later than 10 years after April 22, 1994.

v. If the external floating roof is equipped with a vapor-mounted primary seal and a secondary seal as of December 31, 1992, the requirement for a liquid-mounted or metallic shoe primary seal in section A.I.2.f.ii does not apply until the earlier of the following dates:

(1) the next time the storage vessel is emptied and degassed; or

(2) no later than 10 years after April 22, 1994.

2.g 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 in the following:

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.

2.h 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.

2.i The primary seal shall meet the additional requirements specified in the following:

i. 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; and

ii. there shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

2.j The secondary seal shall meet the additional requirements specified in the following:

i. 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 section A.III.13; and

ii. there shall be no holes, tears, or other openings in the seal or seal fabric.

2.k Determination of equivalence to the reduction in emissions achieved by the requirements of sections A.I.2.f through A.I.2.h will be evaluated according to the following:

If, in the judgment of the Administrator, an alternative means of emission limitation will achieve a reduction in organic HAP emissions at least equivalent to the reduction in organic HAP emissions from that source achieved under any design, equipment, work practice, or operational standards in subpart G or H of 40 CFR Part 63, 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. Any notice required in this section shall be published only after public notice and an opportunity for a hearing. Any person seeking permission to use an alternative means of compliance under this section shall collect, verify, and submit to the Administrator information showing that the alternative means achieves equivalent emission reductions.

The determination of equivalence will be based on the application to the Administrator which shall include the information specified in the following:

i. actual emissions tests that use full-size or scale-model storage vessels that accurately collect and measure all organic HAP emissions from a given control technique, and that accurately simulate wind and account for other emission variables such as temperature and barometric pressure; or

ii. an engineering analysis that the Administrator determines is an accurate method of determining equivalence.

2.l The best available technology (BAT) determination was determined to be compliance with all applicable regulations.

2.m 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 appropriate Ohio EPA District Office or local air agency within 30 days after the change occurs.

2.n The storage tank was installed in 1983 with no modifications, and stores toluene with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. 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.

2. The permittee shall repair conditions that do not meet requirements listed in sections A.III.12, A.III.13, A.I.2.i, and A.I.2.j (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 sections A.III.9 through A.III.11 or during inspections necessary to determine compliance with sections A.I.2.i and A.I.2.j, 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.

3. 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.

III Monitoring and/or Recordkeeping

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. Except as provided in section A.III.8, the permittee shall maintain a record of the period of storage of each petroleum liquid stored and the maximum true vapor pressure of that liquid during the respective storage period.

6. Available data on the typical Reid vapor pressure and the maximum expected storage temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517, unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

7. The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa (2.0 psia) or whose physical properties preclude determination by the recommended method is to be determined from available data and recorded if the estimated true vapor pressure is greater than 6.9 kPa (1.0 psia).

8. The following are exempt from the requirements of sections A.III.5 through A.III.7: each permittee of each storage vessel storing a petroleum liquid with a Reid vapor pressure of less than 6.9 kPa (1.0 psia) provided the maximum true vapor pressure does not exceed 6.9 kPa (1.0 psia).

9. Except as provided in section A.III.14, 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 following frequency:

   a. For an external floating roof vessel equipped with primary and secondary seals, measurements of gaps between the vessel wall and the primary seal shall be performed during the hydrostatic testing of the vessel or by (the first degassing and cleaning activity after August 18, 1998, or within 10 years after promulgation of the rule, whichever is first), whichever occurs last, and at least once every 5 years thereafter.

   b. For an external floating roof vessel equipped with a liquid-mounted or metallic shoe primary seal and without a secondary seal as provided for in section A.I.2.f.iv, measurements of gaps between the vessel wall and the primary seal shall be performed by the first degassing and cleaning activity after August 18, 1998, or within 10 years after promulgation of the rule, whichever is first, and at least once per year thereafter, until a secondary seal is installed. When a secondary seal is installed above the primary seal, measurements of gaps between the vessel wall and both the primary and secondary seals shall be performed within 90 calendar days of installation of the secondary seal, and according to the frequency of this section thereafter.

   c. For an external floating roof vessel equipped with primary and secondary seals, measurements of gaps between the vessel wall and the secondary seal shall be performed by the first degassing and cleaning activity after August 18, 1998, or within 10 years after promulgation of the rule, whichever is first, and at least once per year thereafter.

10. 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 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.

11. Except as provided in section A.III.14, 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:

   a. 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.

   b. 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.

c. The total surface area of each gap described in section A.III.11.b 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.

12. 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.

13. 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 sections A.III.9.a and A.III.9.b.

14. If the permittee determines that it is unsafe to perform the seal gap measurements required in sections A.III.9 through A.III.11 or to inspect the vessel to determine compliance with sections A.I.2.i and A.I.2.j because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with the requirements in either of the following:

    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.

15. The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed.

IV Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) 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. If either the seal gap calculated in accord with section A.V.1.c or the measured maximum seal gap exceeds the limitations specified by sections A.I.2.a through A.I.2.d, a report shall be furnished to the Administrator within 60 days of the date of measurements. The report shall identify the vessel and list each reason why the vessel did not meet the specifications of sections A.I.2.a through A.I.2.d. The report shall also describe the actions necessary to bring the storage vessel into compliance with the specifications of sections A.I.2.a through A.I.2.d.

3. All reports required in section A.IV.4 shall be sent to the Administrator and the Ohio EPA, Northwest District Office at the addresses listed below:

   EPA Region V , Director, Air and Radiation Division, 77 West Jackson Blvd., Chicago, IL 60604-3507.

   Ohio EPA, Northwest District Office, 347 North Dunbridge Rd., Bowling Green, Ohio 43402

   If acceptable to the Administrator, the Ohio EPA, and the permittee of a source, reports may be submitted on electronic media.

4. [40 CFR 63.120(b)] Reporting Requirements

4.a Except as provided in section A.IV.4.b, for all the inspections required by section A.III.15, 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 to afford the Administrator the opportunity to inspect the storage vessel prior to refilling.

4.b If the inspection required by section A.III.15 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 Administrator at least 7 calendar days prior to the refilling.

V Testing Requirements

1. The permittee of each storage vessel which has an external floating roof shall meet the following requirements:

   a. Determine the gap areas and maximum gap widths between the primary seal and the tank wall and between the secondary seal and the tank wall according to the following frequency:

i. For primary seals, gap measurements shall be performed within 60 days of the initial fill with petroleum liquid and at least once every five years thereafter. All primary seal inspections or gap measurements which require the removal or dislodging of the secondary seal shall be accomplished as rapidly as possible and the secondary seal shall be replaced as soon as possible.

ii. For secondary seals, gap measurements shall be performed within 60 days of the initial fill with petroleum liquid and at least once every year thereafter.

iii. If any storage vessel is out of service for a period of one year or more, subsequent refilling with petroleum liquid shall be considered initial fill for the purposes of sections A.V.1.a.i and A.V.1.a.ii.

b. Determine gap widths in the primary and secondary seals individually by the following procedures:

i. Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports.

ii. Measure seal gaps around the entire circumference of the tank in each place where a 1/8 inch diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the tank wall and measure the circumferential distance of each such location.

iii. The total surface area of each gap described in section A.V.1.b.ii shall be determined by using probes of various widths to accurately measure the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.

c. 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 diameter of the tank and compare each ratio to the appropriate ratio in the standard in sections A.I.2.a and A.I.2.b.

d. Provide the Administrator 30 days prior notice of the gap measurement to afford the Administrator the opportunity to have an observer present.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100079 (T090)
Activity Description: Storage of Organic Liquids

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
above ground internal floating roof tank (56,402 gallons)	OAC rule 3745-21-09 (L)	see A.I.2.a through A.I.2.d and A.III.1
	40 CFR 60 Subpart Kb:	
	40 CFR 60.112b	see A.I.2.e through A.I.2.m
	40 CFR 60.113b	see A.III.2 through A.III.5 and A.IV.1
	40 CFR 60.115b	see A.III.6, A.III.7, and A.IV.2 through A.IV.4
	40 CFR 60.116b	see A.III.8 through A.III.10, and A.IV.5
	40 CFR 61 Subpart FF	Control requirements, monitoring and/or record keeping requirements, and reporting requirements are satisfied by the requirements in 40 CFR 60 Subpart Kb

40 CFR 63 Subpart CC:

40 CFR 63.640(n)(1)	Overlap of subpart CC with other regulations for storage vessels - if subject to the provisions of 40 CFR subpart Kb, required to comply only with the requirements of 40 CFR subpart Kb

2. Additional Terms and Conditions

2.a The maximum true vapor pressure of organic liquid stored in this storage tank shall not exceed 11.1 psia.

2.b The fixed roof storage tank shall be equipped with an internal floating roof.

2.c 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.d All openings, except stub drains, shall be equipped with a cover, seal or lid, which is in the closed position at all times, except when in actual use for tank gauging or sampling.

2.e The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

2.f Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

i. A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.

ii. 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.

iii. A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

2.g Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

2.h Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

2.i Automatic bleeder vents shall be equipped with a gasket and 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.j Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

2.k Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

2.l Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

2.m Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

2.n The storage tank was installed in 1951 and modified on January 1, 1985, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

2.o In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement executed by the United States Environmental Protection Agency (USEPA) on February 2, 2001, the permittee installed a pole sleeve system on the slotted guidepole of this emissions unit on December 21, 2001.

The pole sleeve system shall meet the following requirements:

i. Each opening through the deck of the floating roof for a slotted guidepole shall be equipped with a deck cover, a pole wiper and a pole sleeve.

ii. The deck cover shall be equipped with a gasket between the cover and the deck.

iii. The sleeve shall extend into the stored liquid.

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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.

Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

ii. For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(1) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Administrator specifically requests that the liquid be

sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(2) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(1) May be obtained from standard reference texts, or

(2) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or

(3) Measured by an appropriate method approved by the Administrator; or

(4) Calculated by an appropriate method approved by the Administrator.

2. Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the permittee shall repair the items before filling the storage vessel.

3. For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in A.IV.3. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

4. For vessels equipped with a double-seal system as specified in A.I.2.f.ii.:

4.a Visually inspect the vessel as specified in A.III.5. at least every 5 years; or

4.b Visually inspect the vessel as specified in A.III.3.

5. Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal 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 surfaces 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 refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in A.III.3 and A.III.4.b and at intervals no greater than 5 years in the case of vessels specified in A.III.4.a.

6. The permittee shall keep copies of all reports and records required in A.IV.2, A.IV.3, and A.IV.4, for at least 2 years.

7. Keep a record of each inspection performed as required by A.III.2, A.III.3, A.III.4, and A.III.5. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

8. The permittee shall keep copies of all records required by A.III.2 through A.III.10, excluding A.III.9, for at least 2 years.

9. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel (shall be kept for the life of the source).

10. The permittee of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements.

10.a Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in A.III.1.b.

10.b For vessels in which the vapor pressure of the anticipated liquid composition is above 76.6 kPa (11.1 psia), an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:

i. ASTM Method D2879-83 (incorporated by reference--see 40 CFR. 60.17); or

ii. ASTM Method D323-82 (incorporated by reference--see 40 CFR 60.17); or

iii. As measured by an appropriate method as approved by the Administrator.

11. In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement, the permittee shall meet the following:

    a. The sliding cover shall be in place over the slotted-guidepole opening through the floating roof at all times except when the sliding cover must be removed for access.

    b. If the control technology used includes a guidepole float, the float shall be floating within the guidepole at all times except when it must be removed for access to the stored liquid or when the tank is empty.

    c. Visually inspect the deck fitting for the slotted guidepole at least once every 10 years and each time the vessel is emptied and degassed.

    d. If the slotted guidepole deck fitting or control devices have defects, or if a gap of more than 0.32 centimeters (1/8 inch) exists between any gasket required for control of the slotted guidepole deck fitting and any surface that it is intended to seal, such items shall be repaired before filling or refilling the storage vessel with regulated material.

    e. Tanks taken out of hydrocarbon service, for any reason, do not have to have any controls in place during the time they are out of service.

IV Reporting Requirements

1. Notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by A.III.2 and A.III.5 to afford the Administrator the opportunity to have an observer present. If the inspection required by A.III.5 is not planned and the permittee could not have known about the inspection 30 days in advance or 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. Alternatively, 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.

2. Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of A.I.2.e through A.I.2.m and A.III.2. This report shall be an attachment to the notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

3. If any of the conditions described in A.III.3 are detected during the annual visual inspection required by A.III.3, a report shall be furnished to the Administrator within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

4. After each inspection required by A.III.4 that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in A.III.4.b, a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of A.I.2.e through A.I.2.m or A.III.4 and list each repair made.

5. The permittee of each storage vessel either with a design capacity greater than or equal to 151 cubic meters storing a liquid with a maximum true vapor pressure that is normally less than 5.2 kPa (0.75 psia) or with a design capacity greater than or equal to 75 cubic meters but less than 151 cubic meters storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa (4.0 psia) shall notify the Administrator within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100078 (T091)
Activity Description: Storage of Organic Liquids

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
above ground internal floating roof tank (56,402 gallons)	OAC rule 3745-21-09 (L)	see A.I.2.a through A.I.2.d and A.III.1
	40 CFR 60 Subpart Kb	
	40 CFR 60.112b	see A.I.2.e through A.I.2.m
	40 CFR 60.113b	see A.III.2 through A.III.5 and A.IV.1
	40 CFR 60.115b	see A.III.6, A.III.7, and A.IV.2 through A.IV.4
	40 CFR 60.116b	see A.III.8 through A.III.10, and A.IV.5
	40 CFR 61 Subpart FF	Control requirements, monitoring and/or record keeping requirements, and reporting requirements are satisfied by the requirements in 40 CFR 60 Subpart Kb
	40 CFR 63 Subpart CC:	
	40 CFR 63.640(n)(1)	Overlap of subpart CC with other regulations for storage vessels - if subject to the provisions of 40 CFR

subpart Kb, required to comply only with the requirements of 40 CFR subpart Kb

2. Additional Terms and Conditions

2.a The maximum true vapor pressure of organic liquid stored in this storage tank shall not exceed 11.1 psia.

2.b The fixed roof storage tank shall be equipped with an internal floating roof.

2.c 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.d All openings, except stub drains, shall be equipped with a cover, seal or lid, which is in the closed position at all times, except when in actual use for tank gauging or sampling.

2.e The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

2.f Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

i. A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.

ii. 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.

iii. A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

2.g Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

2.h Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

2.i Automatic bleeder vents shall be equipped with a gasket and 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.j Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

2.k Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

2.l Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

2.m Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

2.n The storage tank was installed in 1951 and modified on January 1, 1985, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

2.o In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement executed by the United States Environmental Protection Agency (USEPA) on February 2, 2001, the permittee installed a pole sleeve system on the slotted guidepole of this emissions unit on December 21, 2001.

The pole sleeve system shall meet the following requirements:

i. Each opening through the deck of the floating roof for a slotted guidepole shall be equipped with a deck cover, a pole wiper and a pole sleeve.

ii. The deck cover shall be equipped with a gasket between the cover and the deck.

iii. The sleeve shall extend into the stored liquid.

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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.

Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

ii. For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(1) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(2) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(1) May be obtained from standard reference texts, or

(2) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or

(3) Measured by an appropriate method approved by the Administrator; or

(4) Calculated by an appropriate method approved by the Administrator.

2. Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the permittee shall repair the items before filling the storage vessel.

3. For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in A.IV.3. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

4. For vessels equipped with a double-seal system as specified in A.I.2.f.ii.:

4.a Visually inspect the vessel as specified in A.III.5. at least every 5 years; or

4.b Visually inspect the vessel as specified in A.III.3.

5. Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal 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 surfaces 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 refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in A.III.3 and A.III.4.b and at intervals no greater than 5 years in the case of vessels specified in A.III.4.a.

6. The permittee shall keep copies of all reports and records required in A.IV.2, A.IV.3, and A.IV.4, for at least 2 years.

7. Keep a record of each inspection performed as required by A.III.2, A.III.3, A.III.4, and A.III.5. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

8. The permittee shall keep copies of all records required by A.III.2 through A.III.10, excluding A.III.9, for at least 2 years.

9. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel (shall be kept for the life of the source).

10. The permittee of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements.

10.a Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in A.III.1.b.

10.b For vessels in which the vapor pressure of the anticipated liquid composition is above 76.6 kPa (11.1 psia), an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:

i. ASTM Method D2879-83 (incorporated by reference--see 40 CFR. 60.17); or

ii. ASTM Method D323-82 (incorporated by reference--see 40 CFR 60.17); or

iii. As measured by an appropriate method as approved by the Administrator.

11. In accordance with the Storage Tank Emission Reduction Partnership Program (STERPP) agreement, the permittee shall meet the following:

a. The sliding cover shall be in place over the slotted-guidepole opening through the floating roof at all times except when the sliding cover must be removed for access.

b. If the control technology used includes a guidepole float, the float shall be floating within the guidepole at all times except when it must be removed for access to the stored liquid or when the tank is empty.

c. Visually inspect the deck fitting for the slotted guidepole at least once every 10 years and each time the vessel is emptied and degassed.

d. If the slotted guidepole deck fitting or control devices have defects, or if a gap of more than 0.32 centimeters (1/8 inch) exists between any gasket required for control of the slotted guidepole deck fitting and any surface that it is intended to seal, such items shall be repaired before filling or refilling the storage vessel with regulated material.

e. Tanks taken out of hydrocarbon service, for any reason, do not have to have any controls in place during the time they are out of service.

IV Reporting Requirements

1. Notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by A.III.2 and A.III.5 to afford the Administrator the opportunity to have an observer present. If the inspection required by A.III.5 is not planned and the permittee could not have known about the inspection 30 days in advance or 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. Alternatively, 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.

2. Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of A.I.2.e through A.I.2.m and A.III.2. This report shall be an attachment to the notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

3. If any of the conditions described in A.III.3 are detected during the annual visual inspection required by A.III.3, a report shall be furnished to the Administrator within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

4. After each inspection required by A.III.4 that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in A.III.4.b, a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify

the storage vessel and the reason it did not meet the specifications of A.I.2.e through A.I.2.m or A.III.4 and list each repair made.

5. The permittee of each storage vessel either with a design capacity greater than or equal to 151 cubic meters storing a liquid with a maximum true vapor pressure that is normally less than 5.2 kPa (0.75 psia) or with a design capacity greater than or equal to 75 cubic meters but less than 151 cubic meters storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa (4.0 psia) shall notify the Administrator within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100112 (T092)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof tank with a capacity of 169,205 gallons	OAC rule 3745-21-09 (L)	none, see A.II.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.2
	40 CFR 63.646	see A.II.1, A.III.1, and A.IV.1

2. Additional Terms and Conditions

2.a The storage tank was installed in 1960 with no modifications, and stores organic liquids with a maximum true vapor pressure less than 10.4 kPa (1.51 psia).

This is a Group 2 storage vessel (at an existing source, and the stored-liquid maximum true vapor pressure is less than 10.4 kPa (1.51 psia)).

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 or equal to 10.4 kPa (1.51 psia).

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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. Each 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. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 1.51 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100060 (T093)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof tank with a capacity of 1,504,048 gallons	OAC rule 3745-21-09 (L)	none, see A.II.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.2
	40 CFR 63.646	see A.II.1, A.III.1, and A.IV.1

2. Additional Terms and Conditions

2.a The storage tank was installed in 1954 with no modifications, and stores organic liquids with a maximum true vapor pressure less than 10.4 kPa (1.51 psia).

This is a Group 2 storage vessel (at an existing source, and the stored-liquid maximum true vapor pressure is less than 10.4 kPa (1.51 psia)).

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 or equal to 10.4 kPa (1.51 psia).

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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. Each 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. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 1.51 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100113 (T097)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof tank with a capacity of 169,205 gallons	OAC rule 3745-21-09 (L)	none, see A.II.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.2
	40 CFR 63.646	see A.II.1, A.III.1, and A.IV.1

2. Additional Terms and Conditions

2.a The storage tank was installed in 1960 with no modifications, and stores organic liquids with a maximum true vapor pressure less than 10.4 kPa (1.51 psia).

This is a Group 2 storage vessel (at an existing source, and the stored-liquid maximum true vapor pressure is less than 10.4 kPa (1.51 psia)).

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 or equal to 10.4 kPa (1.51 psia).

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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. Each 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. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 1.51 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100114 (T100)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof tank with a capacity of 163,918 gallons	OAC rule 3745-21-09 (L)	none, see A.II.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.2
	40 CFR 63.646	see A.II.1, A.III.1, and A.IV.1

2. Additional Terms and Conditions

2.a The storage tank was installed in 1960 with no modifications, and stores organic liquids with a maximum true vapor pressure less than 10.4 kPa (1.51 psia).

This is a Group 2 storage vessel (at an existing source, and the stored-liquid maximum true vapor pressure is less than 10.4 kPa (1.51 psia)).

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 or equal to 10.4 kPa (1.51 psia).

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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. Each 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. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 1.51 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100111 (T112)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof tank with a capacity of 616,754 gallons	OAC rule 3745-21-09 (L)	none, see A.II.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.2
	40 CFR 63.646	see A.II.1, A.III.1, and A.IV.1

2. Additional Terms and Conditions

2.a The storage tank was installed in 1954 with no modifications, and stores organic liquids with a maximum true vapor pressure less than 10.4 kPa (1.51 psia).

This is a Group 2 storage vessel (at an existing source, and the stored-liquid maximum true vapor pressure is less than 10.4 kPa (1.51 psia)).

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 or equal to 10.4 kPa (1.51 psia).

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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. Each 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. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 1.51 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100391 (T121)
Activity Description: Storage of Organic Liquids

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
above ground internal floating roof tank (1,381,844 gallons)	OAC rule 3745-31-05 (PTI 03-7232)	11.02 tons of volatile organic compounds (VOC)/yr
	40 CFR 60 Subpart Kb	
	40 CFR 60.112b	see A.I.2.e through A.I.2.m
	40 CFR 60.113b	see A.III.2 through A.III.5 and A.IV.1
	40 CFR 60.115b	see A.III.6, A.III.7, and A.IV.2 through A.IV.4
	40 CFR 60.116b	see A.III.8 through A.III.10, and A.IV.5
	40 CFR 63 Subpart CC:	
	40 CFR 63.640(n)(1)	Overlap of subpart CC with other regulations for storage vessels - if subject to the provisions of 40 CFR subpart Kb, required to comply only

	with the requirements of 40 CFR subpart Kb
OAC rule 3745-21-09 (L)	see A.I.2.a through A.I.2.d and A.III.1

2. Additional Terms and Conditions

2.a The maximum true vapor pressure of organic liquid stored in this storage tank shall not exceed 11.1 psia.

2.b The fixed roof storage tank shall be equipped with an internal floating roof.

2.c 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.d All openings, except stub drains, shall be equipped with a cover, seal or lid, which is in the closed position at all times, except when in actual use for tank gauging or sampling.

2.e The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

2.f Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

i. A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.

ii. 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.

iii. A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is

connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

2.g Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

2.h Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

2.i Automatic bleeder vents shall be equipped with a gasket and 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.j Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

2.k Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

2.l Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

2.m Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

2.n The storage tank was installed in 1962 and modified on October 1, 1993, and stores slop oil with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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.

Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

ii. For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(1) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(2) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(1) May be obtained from standard reference texts, or

(2) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or

(3) Measured by an appropriate method approved by the Administrator; or

(4) Calculated by an appropriate method approved by the Administrator.

2. Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the permittee shall repair the items before filling the storage vessel.

3. For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in A.IV.3. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

4. For vessels equipped with a double-seal system as specified in A.I.2.f.ii.:

4.a Visually inspect the vessel as specified in A.III.5. at least every 5 years; or

4.b Visually inspect the vessel as specified in A.III.3.

5. Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal 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 surfaces 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 refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in A.III.3 and A.III.4.b and at intervals no greater than 5 years in the case of vessels specified in A.III.4.a.

6. The permittee shall keep copies of all reports and records required in A.IV.2, A.IV.3, and A.IV.4, for at least 2 years.

7. Keep a record of each inspection performed as required by A.III.2, A.III.3, A.III.4, and A.III.5. Each record shall identify the storage vessel on which the inspection was performed and shall

contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

8. The permittee shall keep copies of all records required by A.III.2 through A.III.10, excluding A.III.9, for at least 2 years.

9. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel (shall be kept for the life of the source).

10. The permittee of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements.

10.a Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in A.III.1.b.

10.b For vessels in which the vapor pressure of the anticipated liquid composition is above 76.6 kPa (11.1 psia), an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:

i. ASTM Method D2879-83 (incorporated by reference--see 40 CFR. 60.17); or

ii. ASTM Method D323-82 (incorporated by reference--see 40 CFR 60.17); or

iii. As measured by an appropriate method as approved by the Administrator.

IV Reporting Requirements

1. Notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by A.III.2 and A.III.5 to afford the Administrator the opportunity to have an observer present. If the inspection required by A.III.5 is not planned and the permittee could not have known about the inspection 30 days in advance or 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. Alternatively, 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.

2. Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of A.I.2.e through A.I.2.m and A.III.2. This report shall be an attachment to the notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

3. If any of the conditions described in A.III.3 are detected during the annual visual inspection required by A.III.3, a report shall be furnished to the Administrator within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

4. After each inspection required by A.III.4 that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in A.III.4.b, a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of A.I.2.e through A.I.2.m or A.III.4 and list each repair made.

5. The permittee of each storage vessel either with a design capacity greater than or equal to 151 cubic meters storing a liquid with a maximum true vapor pressure that is normally less than 5.2 kPa (0.75 psia) or with a design capacity greater than or equal to 75 cubic meters but less than 151 cubic meters storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa (4.0 psia) shall notify the Administrator within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range.

V Testing Requirements

1. Compliance with the emission limitations in section A.I. of the terms and conditions of this permit shall be determined in accordance with the following methods:

1.a Emission Limitation:

11.02 tons of VOC/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance by working and breathing loss calculations as determined by the U.S. EPA Tanks 4.0 program.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100022 (T123)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof tank with a capacity of 1,381,844 gallons	OAC rule 3745-21-09 (L)	none, see A.II.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.2
	40 CFR 63.646	see A.II.1, A.III.1, and A.IV.1

2. Additional Terms and Conditions

2.a The storage tank was installed in 1962 with no modifications, and stores organic liquids with a maximum true vapor pressure less than 10.4 kPa (1.51 psia).

This is a Group 2 storage vessel (at an existing source, and the stored-liquid maximum true vapor pressure is less than 10.4 kPa (1.51 psia)).

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 or equal to 10.4 kPa (1.51 psia).

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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. Each 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. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 1.51 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100057 (T161)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof tank with a capacity of 4,060,929 gallons	OAC rule 3745-21-09 (L)	none, see A.II.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.2
	40 CFR 63.646	see A.II.1, A.III.1, and A.IV.1

2. Additional Terms and Conditions

2.a The storage tank was installed in 1970 with no modifications, and stores organic liquids with a maximum true vapor pressure less than 10.4 kPa (1.51 psia).

This is a Group 2 storage vessel (at an existing source, and the stored-liquid maximum true vapor pressure is less than 10.4 kPa (1.51 psia)).

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 or equal to 10.4 kPa (1.51 psia).

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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. Each 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. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 1.51 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100298 (T164)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof tank with a capacity of 4,060,929 gallons	OAC rule 3745-21-09 (L)	none, see A.II.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.2
	40 CFR 63.646	see A.II.1, A.III.1, and A.IV.1

2. Additional Terms and Conditions

2.a The storage tank was installed in 1957 with no modifications, and stores organic liquids with a maximum true vapor pressure less than 10.4 kPa (1.51 psia).

This is a Group 2 storage vessel (at an existing source, and the stored-liquid maximum true vapor pressure is less than 10.4 kPa (1.51 psia)).

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 or equal to 10.4 kPa (1.51 psia).

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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. Each 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. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 1.51 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100218 (T165)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof storage tank with a capacity of 17,626 gallons	OAC rule 3745-21-09(L)(2)(a)	exempt, see A.I.2.a
	40 CFR Part 63, Subpart CC	exempt, see A.I.2.b

2. Additional Terms and Conditions

2.a This emissions unit is exempt from the requirements of OAC rule 3745-21-09(L)(1) because it is a fixed roof storage tank with a capacity less than 40,000 gallons.

2.b The storage tank was installed in 1930 with no modifications, and stores slop oil with a maximum true vapor pressure less than 10.4 kPa (1.51 psia).

This is a Group 2 storage vessel, as defined in 40 CFR 63.641[i.e., storage vessel at an existing source with a stored-liquid maximum true vapor pressure less than 10.4 kPa (1.51 psia)]; therefore, it is exempt from the requirements of 40 CFR Part 63, Subpart CC.

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100454 (T175)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof tank with a capacity of 88,128 gallons	OAC rule 3745-21-09 (L)	none, see A.II.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.2
	40 CFR 63.646	see A.II.1, A.III.1, and A.IV.1

2. Additional Terms and Conditions

2.a The storage tank was installed in 1953 with no modifications, and stores organic liquids with a maximum true vapor pressure less than 10.4 kPa (1.51 psia).

This is a Group 2 storage vessel (at an existing source, and the stored-liquid maximum true vapor pressure is less than 10.4 kPa (1.51 psia)).

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 or equal to 10.4 kPa (1.51 psia).

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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. Each 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. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 1.51 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100457 (T176)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof tank with a capacity of 705,022 gallons	OAC rule 3745-21-09 (L)	none, see A.II.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.2
	40 CFR 63.646	see A.II.1, A.III.1, and A.IV.1

2. Additional Terms and Conditions

2.a The storage tank was installed in 1958 with no modifications, and stores organic liquids with a maximum true vapor pressure less than 10.4 kPa (1.51 psia).

This is a Group 2 storage vessel (at an existing source, and the stored-liquid maximum true vapor pressure is less than 10.4 kPa (1.51 psia)).

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 or equal to 10.4 kPa (1.51 psia).

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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. Each 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. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 1.51 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100458 (T177)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof tank with a capacity of 705,022 gallons	OAC rule 3745-21-09 (L)	none, see A.II.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.2
	40 CFR 63.646	see A.II.1, A.III.1, and A.IV.1

2. Additional Terms and Conditions

2.a The storage tank was installed in 1958 with no modifications, and stores organic liquids with a maximum true vapor pressure less than 10.4 kPa (1.51 psia).

This is a Group 2 storage vessel (at an existing source, and the stored-liquid maximum true vapor pressure is less than 10.4 kPa (1.51 psia)).

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 or equal to 10.4 kPa (1.51 psia).

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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. Each 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. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 1.51 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100459 (T178)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof tank with a capacity of 705,022 gallons	OAC rule 3745-21-09 (L)	none, see A.II.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.2
	40 CFR 63.646	see A.II.1, A.III.1, and A.IV.1

2. Additional Terms and Conditions

2.a The storage tank was installed in 1959 with no modifications, and stores organic liquids with a maximum true vapor pressure less than 10.4 kPa (1.51 psia).

This is a Group 2 storage vessel (at an existing source, and the stored-liquid maximum true vapor pressure is less than 10.4 kPa (1.51 psia)).

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 or equal to 10.4 kPa (1.51 psia).

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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. Each 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. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 1.51 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100461 (T179)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof tank with a capacity of 88,128 gallons	OAC rule 3745-21-09 (L)	none, see A.II.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.2
	40 CFR 63.646	see A.II.1, A.III.1, and A.IV.1

2. Additional Terms and Conditions

2.a The storage tank was installed in 1968 with no modifications, and stores organic liquids with a maximum true vapor pressure less than 10.4 kPa (1.51 psia).

This is a Group 2 storage vessel (at an existing source, and the stored-liquid maximum true vapor pressure is less than 10.4 kPa (1.51 psia)).

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 or equal to 10.4 kPa (1.51 psia).

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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. Each 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. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 1.51 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100453 (T180)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof tank with a capacity of 88,128 gallons	OAC rule 3745-21-09 (L)	none, see A.II.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.2
	40 CFR 63.646	see A.II.1, A.III.1, and A.IV.1

2. Additional Terms and Conditions

2.a The storage tank was installed in 1953 with no modifications, and stores organic liquids with a maximum true vapor pressure less than 10.4 kPa (1.51 psia).

This is a Group 2 storage vessel (at an existing source, and the stored-liquid maximum true vapor pressure is less than 10.4 kPa (1.51 psia)).

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 or equal to 10.4 kPa (1.51 psia).

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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. Each 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. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 1.51 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100440 (T181)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof tank with a capacity of 88,128 gallons	OAC rule 3745-21-09 (L)	none, see A.II.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.2
	40 CFR 63.646	see A.II.1, A.III.1, and A.IV.1

2. Additional Terms and Conditions

2.a The storage tank was installed in 1950 with no modifications, and stores organic liquids with a maximum true vapor pressure less than 10.4 kPa (1.51 psia).

This is a Group 2 storage vessel (at an existing source, and the stored-liquid maximum true vapor pressure is less than 10.4 kPa (1.51 psia)).

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 or equal to 10.4 kPa (1.51 psia).

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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. Each 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. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 1.51 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100269 (T182)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof tank with a capacity of 176,256 gallons	OAC rule 3745-21-09 (L)	none, see A.II.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.2
	40 CFR 63.646	see A.II.1, A.III.1, and A.IV.1

2. Additional Terms and Conditions

2.a The storage tank was installed in 1949 with no modifications, and stores organic liquids with a maximum true vapor pressure less than 10.4 kPa (1.51 psia).

This is a Group 2 storage vessel (at an existing source, and the stored-liquid maximum true vapor pressure is less than 10.4 kPa (1.51 psia)).

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 or equal to 10.4 kPa (1.51 psia).

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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. Each 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. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 1.51 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100089 (T184)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof tank with a capacity of 132,192 gallons	OAC rule 3745-21-09 (L)	none, see A.II.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.2
	40 CFR 63.646	see A.II.1, A.III.1, and A.IV.1

2. Additional Terms and Conditions

2.a The storage tank was installed in 1961 with no modifications, and stores organic liquids with a maximum true vapor pressure less than 10.4 kPa (1.51 psia).

This is a Group 2 storage vessel (at an existing source, and the stored-liquid maximum true vapor pressure is less than 10.4 kPa (1.51 psia)).

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 or equal to 10.4 kPa (1.51 psia).

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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. Each 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. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 1.51 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100044 (T190)
Activity Description: Storage of Organic Liquids

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
above ground internal floating roof tank (230,331 gallons)	OAC rule 3745-31-05 (PTI 03-5614)	0.67 lb of volatile organic compounds (VOC)/hr and 2.93 tons of VOC/yr 0.04 lb of benzene/hr and 0.18 ton of benzene/yr
	40 CFR 60 Subpart Kb	
	40 CFR 60.112b	see A.I.2.e through A.I.2.m
	40 CFR 60.113b	see A.III.2 through A.III.5 and A.IV.1
	40 CFR 60.115b	see A.III.6, A.III.7, and A.IV.2 through A.IV.4
	40 CFR 60.116b	see A.III.8 through A.III.10, and A.IV.5

40 CFR 63 Subpart CC:

40 CFR 63.640(n)(1)	Overlap of subpart CC with other regulations for storage vessels - if subject to the provisions of 40 CFR subpart Kb, required to comply only with the requirements of 40 CFR subpart Kb
OAC rule 3745-21-09 (L)	see A.I.2.a through A.I.2.d and A.III.1

2. Additional Terms and Conditions

2.a The maximum true vapor pressure of organic liquid stored in this storage tank shall not exceed 11.1 psia.

2.b The fixed roof storage tank shall be equipped with an internal floating roof.

2.c 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.d All openings, except stub drains, shall be equipped with a cover, seal or lid, which is in the closed position at all times, except when in actual use for tank gauging or sampling.

2.e The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

2.f Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

i. A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.

ii. 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.

iii. A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

2.g Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

2.h Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

2.i Automatic bleeder vents shall be equipped with a gasket and 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.j Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

2.k Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

2.l Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

2.m Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

2.n The storage tank was installed in 1990 and modified on June 1, 1991, and stores light reformate with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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.

Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

ii. For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(1) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(2) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(1) May be obtained from standard reference texts, or

(2) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or

(3) Measured by an appropriate method approved by the Administrator; or

(4) Calculated by an appropriate method approved by the Administrator.

2. Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the permittee shall repair the items before filling the storage vessel.

3. For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in A.IV.3. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

4. For vessels equipped with a double-seal system as specified in A.I.2.f.ii.:

4.a Visually inspect the vessel as specified in A.III.5. at least every 5 years; or

4.b Visually inspect the vessel as specified in A.III.3.

5. Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal 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 surfaces 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 refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels

conducting the annual visual inspection as specified in A.III.3 and A.III.4.b and at intervals no greater than 5 years in the case of vessels specified in A.III.4.a.

6. The permittee shall keep copies of all reports and records required in A.IV.2, A.IV.3, and A.IV.4, for at least 2 years.

7. Keep a record of each inspection performed as required by A.III.2, A.III.3, A.III.4, and A.III.5. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

8. The permittee shall keep copies of all records required by A.III.2 through A.III.10, excluding A.III.9, for at least 2 years.

9. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel (shall be kept for the life of the source).

10. The permittee of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements.

10.a Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in A.III.1.b.

10.b For vessels in which the vapor pressure of the anticipated liquid composition is above 76.6 kPa (11.1 psia), an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:

i. ASTM Method D2879-83 (incorporated by reference--see 40 CFR. 60.17); or

ii. ASTM Method D323-82 (incorporated by reference--see 40 CFR 60.17); or

iii. As measured by an appropriate method as approved by the Administrator.

11. The permittee shall maintain monthly records of the amount of (gallons per month and total gallons, to date for the calendar year) material throughput for this emissions unit.

IV Reporting Requirements

1. Notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by A.III.2 and A.III.5 to afford the Administrator the opportunity to have an observer present. If the inspection required by A.III.5 is not planned and the permittee could not have known about the inspection 30 days in advance or 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. Alternatively, 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.

2. Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of A.I.2.e through A.I.2.m and A.III.2. This report shall be an attachment to the notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

3. If any of the conditions described in A.III.3 are detected during the annual visual inspection required by A.III.3, a report shall be furnished to the Administrator within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

4. After each inspection required by A.III.4 that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in A.III.4.b, a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of A.I.2.e through A.I.2.m or A.III.4 and list each repair made.

5. The permittee of each storage vessel either with a design capacity greater than or equal to 151 cubic meters storing a liquid with a maximum true vapor pressure that is normally less than 5.2 kPa (0.75 psia) or with a design capacity greater than or equal to 75 cubic meters but less than 151 cubic meters storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa (4.0 psia) shall notify the Administrator within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range.

V Testing Requirements

1. Compliance with the emission limitations in section A.I. of the terms and conditions of this permit shall be determined in accordance with the following methods:

1.a Emission Limitation:

0.67 lb of VOC/hr

Applicable Compliance Method:

The permittee shall demonstrate compliance by working and breathing loss calculations as determined by the U.S. EPA Tanks 4.0 program.

1.b Emission Limitation:

2.93 tons of VOC/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance by working and breathing loss calculations as determined by the U.S. EPA Tanks 4.0 program.

1.c Emission Limitation:

0.04 lb of benzene/hr

Applicable Compliance Method:

The permittee shall demonstrate compliance by working and breathing loss calculations as determined by the U.S. EPA Tanks 4.0 program.

1.d Emission Limitation:

0.18 ton of benzene/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance by working and breathing loss calculations as determined by the U.S. EPA Tanks 4.0 program.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100172 (T191)
Activity Description: Storage of Organic Liquids

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
above ground internal floating roof tank (2,284,273 gallons)	OAC rule 3745-31-05 (PTI 03-5325)	see A.I.2.n
	40 CFR 60 Subpart Kb	
	40 CFR 60.112b	see A.I.2.e through A.I.2.m
	40 CFR 60.113b	see A.III.2 through A.III.5 and A.IV.1
	40 CFR 60.115b	see A.III.6, A.III.7, and A.IV.2 through A.IV.4
	40 CFR 60.116b	see A.III.8 through A.III.10, and A.IV.5
	40 CFR 61 Subpart FF	Control requirements, monitoring and/or record keeping requirements, and reporting requirements are satisfied by the requirements in 40 CFR 60 Subpart Kb
	40 CFR 63 Subpart CC:	

40 CFR 63.640(n)(1)	Overlap of subpart CC with other regulations for storage vessels - if subject to the provisions of 40 CFR subpart Kb, required to comply only with the requirements of 40 CFR subpart Kb
OAC rule 3745-21-09 (L)	see A.I.2.a through A.I.2.d and A.III.1

2. Additional Terms and Conditions

2.a The maximum true vapor pressure of organic liquid stored in this storage tank shall not exceed 11.1 psia.

2.b The fixed roof storage tank shall be equipped with an internal floating roof.

2.c 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.d All openings, except stub drains, shall be equipped with a cover, seal or lid, which is in the closed position at all times, except when in actual use for tank gauging or sampling.

2.e The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

2.f Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

i. A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.

ii. 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.

iii. A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

2.g Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

2.h Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

2.i Automatic bleeder vents shall be equipped with a gasket and 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.j Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

2.k Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

2.l Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

2.m Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

2.n No limits, pursuant to OAC rule 3745-31-05, were established in PTI 03-5325 for this emissions unit.

2.o The storage tank was installed in 1991 with no modifications, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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.

Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

ii. For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(1) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(2) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(1) May be obtained from standard reference texts, or

(2) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or

(3) Measured by an appropriate method approved by the Administrator; or

(4) Calculated by an appropriate method approved by the Administrator.

2. Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the permittee shall repair the items before filling the storage vessel.

3. For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in A.IV.3. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

4. For vessels equipped with a double-seal system as specified in A.I.2.f.ii.:

4.a Visually inspect the vessel as specified in A.III.5. at least every 5 years; or

4.b Visually inspect the vessel as specified in A.III.3.

5. Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal 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 surfaces 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 refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels

conducting the annual visual inspection as specified in A.III.3 and A.III.4.b and at intervals no greater than 5 years in the case of vessels specified in A.III.4.a.

6. The permittee shall keep copies of all reports and records required in A.IV.2, A.IV.3, and A.IV.4, for at least 2 years.

7. Keep a record of each inspection performed as required by A.III.2, A.III.3, A.III.4, and A.III.5. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

8. The permittee shall keep copies of all records required by A.III.2 through A.III.10, excluding A.III.9, for at least 2 years.

9. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel (shall be kept for the life of the source).

10. The permittee of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements.

10.a Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in A.III.1.b.

10.b For vessels in which the vapor pressure of the anticipated liquid composition is above 76.6 kPa (11.1 psia), an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:

i. ASTM Method D2879-83 (incorporated by reference--see 40 CFR. 60.17); or

ii. ASTM Method D323-82 (incorporated by reference--see 40 CFR 60.17); or

iii. As measured by an appropriate method as approved by the Administrator.

IV Reporting Requirements

1. Notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by A.III.2 and A.III.5 to afford the Administrator the opportunity to have an observer present. If the inspection required by A.III.5 is not planned and the permittee could not have known about the inspection 30 days in advance or 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. Alternatively, 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.

2. Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of A.I.2.e through A.I.2.m and A.III.2. This report shall be an attachment to the notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

3. If any of the conditions described in A.III.3 are detected during the annual visual inspection required by A.III.3, a report shall be furnished to the Administrator within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

4. After each inspection required by A.III.4 that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in A.III.4.b, a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of A.I.2.e through A.I.2.m or A.III.4 and list each repair made.

5. The permittee of each storage vessel either with a design capacity greater than or equal to 151 cubic meters storing a liquid with a maximum true vapor pressure that is normally less than 5.2 kPa (0.75 psia) or with a design capacity greater than or equal to 75 cubic meters but less than 151 cubic meters storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa (4.0 psia) shall notify the Administrator within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100173 (T192)
Activity Description: Storage of Organic Liquids

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
above ground internal floating roof tank (2,284,273 gallons)	OAC rule 3745-31-05 (PTI 03-5325)	see A.I.2.n
	40 CFR 60 Subpart Kb:	
	40 CFR 60.112b	see A.I.2.e through A.I.2.m
	40 CFR 60.113b	see A.III.2 through A.III.5 and A.IV.1
	40 CFR 60.115b	see A.III.6, A.III.7, and A.IV.2 through A.IV.4
	40 CFR 60.116b	see A.III.8 through A.III.10, and A.IV.5
	40 CFR 61 Subpart FF	Control requirements, monitoring and/or record keeping requirements, and reporting requirements are satisfied by the requirements in 40 CFR 60 Subpart Kb
	40 CFR 63 Subpart CC:	

40 CFR 63.640(n)(1)	Overlap of subpart CC with other regulations for storage vessels - if subject to the provisions of 40 CFR subpart Kb, required to comply only with the requirements of 40 CFR subpart Kb
OAC rule 3745-21-09 (L)	see A.I.2.a through A.I.2.d and A.III.1

2. Additional Terms and Conditions

2.a The maximum true vapor pressure of organic liquid stored in this storage tank shall not exceed 11.1 psia.

2.b The fixed roof storage tank shall be equipped with an internal floating roof.

2.c 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.d All openings, except stub drains, shall be equipped with a cover, seal or lid, which is in the closed position at all times, except when in actual use for tank gauging or sampling.

2.e The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

2.f Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

i. A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.

ii. 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.

iii. A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

2.g Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

2.h Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

2.i Automatic bleeder vents shall be equipped with a gasket and 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.j Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

2.k Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

2.l Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

2.m Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

2.n No limits, pursuant to OAC rule 3745-31-05, were established in PTI 03-5325 for this emissions unit.

2.o The storage tank was installed in 1991 with no modifications, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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.

Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

ii. For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(1) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(2) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(1) May be obtained from standard reference texts, or

(2) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or

(3) Measured by an appropriate method approved by the Administrator; or

(4) Calculated by an appropriate method approved by the Administrator.

2. Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the permittee shall repair the items before filling the storage vessel.

3. For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in A.IV.3. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

4. For vessels equipped with a double-seal system as specified in A.I.2.f.ii.:

4.a Visually inspect the vessel as specified in A.III.5. at least every 5 years; or

4.b Visually inspect the vessel as specified in A.III.3.

5. Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal 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 surfaces 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 refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels

conducting the annual visual inspection as specified in A.III.3 and A.III.4.b and at intervals no greater than 5 years in the case of vessels specified in A.III.4.a.

6. The permittee shall keep copies of all reports and records required in A.IV.2, A.IV.3, and A.IV.4, for at least 2 years.

7. Keep a record of each inspection performed as required by A.III.2, A.III.3, A.III.4, and A.III.5. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

8. The permittee shall keep copies of all records required by A.III.2 through A.III.10, excluding A.III.9, for at least 2 years.

9. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel (shall be kept for the life of the source).

10. The permittee of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements.

10.a Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in A.III.1.b.

10.b For vessels in which the vapor pressure of the anticipated liquid composition is above 76.6 kPa (11.1 psia), an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:

i. ASTM Method D2879-83 (incorporated by reference--see 40 CFR. 60.17); or

ii. ASTM Method D323-82 (incorporated by reference--see 40 CFR 60.17); or

iii. As measured by an appropriate method as approved by the Administrator.

IV Reporting Requirements

1. Notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by A.III.2 and A.III.5 to afford the Administrator the opportunity to have an observer present. If the inspection required by A.III.5 is not planned and the permittee could not have known about the inspection 30 days in advance or 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. Alternatively, 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.

2. Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of A.I.2.e through A.I.2.m and A.III.2. This report shall be an attachment to the notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

3. If any of the conditions described in A.III.3 are detected during the annual visual inspection required by A.III.3, a report shall be furnished to the Administrator within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

4. After each inspection required by A.III.4 that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in A.III.4.b, a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of A.I.2.e through A.I.2.m or A.III.4 and list each repair made.

5. The permittee of each storage vessel either with a design capacity greater than or equal to 151 cubic meters storing a liquid with a maximum true vapor pressure that is normally less than 5.2 kPa (0.75 psia) or with a design capacity greater than or equal to 75 cubic meters but less than 151 cubic meters storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa (4.0 psia) shall notify the Administrator within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100001 (T194)
Activity Description: Storage of Organic Liquids

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
above ground fixed roof tank (338,411 gallons)	OAC rule 3745-31-05 (PTI 03-5770)	see A.I.2.b
	40 CFR 60 Subpart Kb:	
	40 CFR 60.116b	see A.III.1.b through A.III.5
	40 CFR 63 Subpart CC:	
	40 CFR 63.640(n)(1)	overlap of subpart CC with other regulations for storage vessels - if subject to the provisions of 40 CFR subpart Kb, required to comply only with the requirements of 40 CFR subpart Kb
	OAC rule 3745-21-09 (L)	none, see A.II.1

2. Additional Terms and Conditions

2.a The storage tank was installed in 1992 with no modifications, and stores organic liquids with a maximum true vapor pressure of 0.7499 psia.

This is a Group 2 storage vessel (at an existing source, and stored-liquid maximum true vapor pressure less than 10.4 kPa (1.51 psia)).

2.b No limits, pursuant to OAC rule 3745-31-05, were established in PTI 03-5770 for this emissions unit.

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 or equal to 5.2 kPa (0.75 psia).

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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.

Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

ii. For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(1) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(2) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(1) May be obtained from standard reference texts, or

(2) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or

(3) Measured by an appropriate method approved by the Administrator; or

(4) Calculated by an appropriate method approved by the Administrator.

2. The permittee shall keep copies of all records required by A.III.1 through A.III.5, excluding A.III.3, for at least 2 years.

3. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel (shall be kept for the life of the source).

4. The permittee of each storage vessel either with a design capacity greater than or equal to 151 cubic meters storing a liquid with a maximum true vapor pressure that is normally less than 5.2 kPa or with a design capacity greater than or equal to 75 cubic meters but less than 151 cubic meters storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa shall notify the Administrator within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor vapor pressure values for each volume range.

5. The permittee of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements.

5.a Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in A.III.1.b.

5.b For vessels in which the vapor pressure of the anticipated liquid composition is above 76.6 kPa, an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:

i. ASTM Method D2879-83 (incorporated by reference--see 40 CFR. 60.17); or

ii. ASTM Method D323-82 (incorporated by reference--see 40 CFR 60.17); or

iii. As measured by an appropriate method as approved by the Administrator.

IV Reporting Requirements

1. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 0.75 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100460 (T195)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof tank with a capacity of 338,411 gallons	OAC rule 3745-21-09 (L)	none, see A.II.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.2
	40 CFR 63.646	see A.II.1, A.III.1, and A.IV.1

2. Additional Terms and Conditions

2.a The storage tank was installed in 1959 with no modifications, and stores organic liquids with a maximum true vapor pressure less than 10.4 kPa (1.51 psia).

This is a Group 2 storage vessel (at an existing source, and the stored-liquid maximum true vapor pressure is less than 10.4 kPa (1.51 psia)).

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 or equal to 10.4 kPa (1.51 psia).

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

   a. The types of petroleum liquids stored in the tank.

   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. Each 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. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 1.51 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100006 (T196)
Activity Description: Storage of Organic Liquids

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
above ground internal floating roof tank (1,265,938 gallons)	OAC rule 3745-31-05 (PTI 03-13742)	3.44 tons of volatile organic compunds (VOC)/yr see A.I.2.o
	40 CFR 60 Subpart Kb:	
	40 CFR 60.112b	see A.I.2.e through A.I.2.m
	40 CFR 60.113b	see A.III.2 through A.III.5 and A.IV.1
	40 CFR 60.115b	see A.III.6, A.III.7, and A.IV.2 through A.IV.4
	40 CFR 60.116b	see A.III.8 through A.III.10, and A.IV.5
	40 CFR 63 Subpart CC:	
	40 CFR 63.640(n)(1)	Overlap of subpart CC with other regulations for storage vessels - if subject to the provisions of 40 CFR subpart Kb, required to comply only

	with the requirements of 40 CFR subpart Kb
OAC rule 3745-21-09 (L)	see A.I.2.a through A.I.2.d and A.III.1

2. Additional Terms and Conditions

2.a The maximum true vapor pressure of organic liquid stored in this storage tank shall not exceed 11.1 psia.

2.b The fixed roof storage tank shall be equipped with an internal floating roof.

2.c 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.d All openings, except stub drains, shall be equipped with a cover, seal or lid, which is in the closed position at all times, except when in actual use for tank gauging or sampling.

2.e The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

2.f Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

i. A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.

ii. 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.

iii. A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

2.g Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

2.h Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

2.i Automatic bleeder vents shall be equipped with a gasket and 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.j Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

2.k Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

2.l Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

2.m Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

2.n The storage tank was installed in 1993 with no modifications, and stores foul condensate solution with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. The permittee shall not exceed an annual material throughput rate of 74,994,026 gallons.

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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.

Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

ii. For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(1) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(2) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(1) May be obtained from standard reference texts, or

(2) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or

(3) Measured by an appropriate method approved by the Administrator; or

(4) Calculated by an appropriate method approved by the Administrator.

2. Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the permittee shall repair the items before filling the storage vessel.

3. For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in A.IV.3. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

4. For vessels equipped with a double-seal system as specified in A.I.2.f.ii.:

4.a Visually inspect the vessel as specified in A.III.5. at least every 5 years; or

4.b Visually inspect the vessel as specified in A.III.3.

5. Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal 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 surfaces 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 refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in A.III.3 and A.III.4.b and at intervals no greater than 5 years in the case of vessels specified in A.III.4.a.

6. The permittee shall keep copies of all reports and records required in A.IV.2, A.IV.3, and A.IV.4, for at least 2 years.

7. Keep a record of each inspection performed as required by A.III.2, A.III.3, A.III.4, and A.III.5. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

8. The permittee shall keep copies of all records required by A.III.2 through A.III.10, excluding A.III.9, for at least 2 years.

9. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel (shall be kept for the life of the source).

10. The permittee of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements.

10.a Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in A.III.1.b.

10.b For vessels in which the vapor pressure of the anticipated liquid composition is above 76.6 kPa (11.1 psia), an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:

i. ASTM Method D2879-83 (incorporated by reference--see 40 CFR. 60.17); or

ii. ASTM Method D323-82 (incorporated by reference--see 40 CFR 60.17); or

iii. As measured by an appropriate method as approved by the Administrator.

11. The permittee shall maintain monthly records of the amount of (gallons per month and total gallons, to date for the calendar year) material throughput for this emissions unit.

IV Reporting Requirements

1. Notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by A.III.2 and A.III.5 to afford the Administrator the opportunity to have an observer present. If the inspection required by A.III.5 is not planned and the permittee could not have known about the inspection 30 days in advance or 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. Alternatively, 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.

2. Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of A.I.2.e through A.I.2.m and A.III.2. This report shall be an attachment to the notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

3. If any of the conditions described in A.III.3 are detected during the annual visual inspection required by A.III.3, a report shall be furnished to the Administrator within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

4. After each inspection required by A.III.4 that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in A.III.4.b, a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of A.I.2.e through A.I.2.m or A.III.4 and list each repair made.

5. The permittee of each storage vessel either with a design capacity greater than or equal to 151 cubic meters storing a liquid with a maximum true vapor pressure that is normally less than 5.2 kPa (0.75 psia) or with a design capacity greater than or equal to 75 cubic meters but less than 151 cubic meters storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa (4.0 psia) shall notify the Administrator within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range.

6. The permittee shall submit annual deviation (excursion) reports that identify any and all exceedances of the annual material throughput limitation, as well as the corrective actions taken to achieve compliance. If no deviations occurred during a calendar year, the permittee shall submit an annual report which states that no deviations occurred during that year. These reports shall be submitted by January 31 of each year.

V Testing Requirements

1. Compliance with the emission limitations in section A.I. of the terms and conditions of this permit shall be determined in accordance with the following methods:

1.a Emission Limitation:

3.44 tons of VOC/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance by working and breathing loss calculations as determined by the U.S. EPA Tanks 4.0 program with a maximum annual material throughput of 74,994,026 gallons.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100005 (T197)
Activity Description: Storage of Organic Liquids

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
above ground fixed roof tank (3,828,272 gallons)	OAC rule 3745-21-09 (L)	none, see A.II.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.2
	40 CFR 63.646	see A.II.1, A.III.1, and A.IV.1

2. Additional Terms and Conditions

2.a The storage tank was installed in 1993 with no modifications, and stores intermediate diesel fuel with a maximum true vapor pressure less than 10.4 kPa (1.51 psia).

This is a Group 2 storage vessel (at an existing source, and the stored-liquid maximum true vapor pressure is less than 10.4 kPa (1.51 psia)).

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 or equal to 10.4 kPa (1.51 psia).

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

   a. The types of petroleum liquids stored in the tank.

   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. Each 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. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 1.51 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100024 (T198)
Activity Description: Storage of Organic Liquids

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
above ground fixed roof tank (121,176 gallons)	OAC rule 3745-31-05 (PTI 03-6387)	0.57 ton of volatile organic compounds (VOC)/yr
	40 CFR 60 Subpart Kb:	
	40 CFR 60.116b	see A.III.1.b through A.III.5
	40 CFR 63 Subpart CC:	
	40 CFR 63.640(n)(1)	overlap of subpart CC with other regulations for storage vessels - if subject to the provisions of 40 CFR subpart Kb, required to comply only with the requirements of 40 CFR subpart Kb
	OAC rule 3745-21-09 (L)	none, see A.II.1

2. Additional Terms and Conditions

2.a The storage tank was installed in 1992 with no modifications, and stores organic liquids with a maximum true vapor pressure of 0.7499 psia.

This is a Group 2 storage vessel (at an existing source, and stored-liquid maximum true vapor pressure less than 10.4 kPa (1.51 psia)).

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 or equal to 5.2 kPa (0.75 psia).

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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.

Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

ii. For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(1) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(2) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(1) May be obtained from standard reference texts, or

(2) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or

(3) Measured by an appropriate method approved by the Administrator; or

(4) Calculated by an appropriate method approved by the Administrator.

2. The permittee shall keep copies of all records required by A.III.1 through A.III.5, excluding A.III.3, for at least 2 years.

3. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel (shall be kept for the life of the source).

4. The permittee of each storage vessel either with a design capacity greater than or equal to 151 cubic meters storing a liquid with a maximum true vapor pressure that is normally less than 5.2 kPa or with a design capacity greater than or equal to 75 cubic meters but less than 151 cubic meters storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa shall notify the Administrator within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor vapor pressure values for each volume range.

5. The permittee of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements.

5.a Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in A.III.1.b.

5.b For vessels in which the vapor pressure of the anticipated liquid composition is above 76.6 kPa, an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:

i. ASTM Method D2879-83 (incorporated by reference--see 40 CFR. 60.17); or

ii. ASTM Method D323-82 (incorporated by reference--see 40 CFR 60.17); or

iii. As measured by an appropriate method as approved by the Administrator.

IV Reporting Requirements

1. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 0.75 pounds per square inch absolute, the

permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

1. Compliance with the emission limitations in section A.I. of the terms and conditions of this permit shall be determined in accordance with the following methods:

1.a Emission Limitation: 0.57 ton of VOC/yr

Applicable Compliance Method: The permittee shall demonstrate compliance by working and breathing loss calculations as determined by U.S. EPA Tanks 4.0 program with a maximum annual material throughput of 102,809 gallons.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 164788 (T200)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof storage tank with a capacity of 18,213 gallons	OAC rule 3745-21-09(L)(2)(a)	exempt see A.I.2.a
	40 CFR Part 63, Subpart CC	exempt see A.I.2.b

2. Additional Terms and Conditions

2.a This emissions unit is exempt from the requirements of OAC rule 3745-21-09(L)(1) because it is a fixed roof storage tank with a capacity less than 40,000 gallons.

2.b The storage tank was installed in 1948 with no modifications, and stores organic liquids with a maximum true vapor pressure of 1.50 psia.

This is a Group 2 storage vessel, as defined in 40 CFR 63.641[i.e., storage vessel at an existing source with a stored-liquid maximum true vapor pressure less than 10.4 kPa (1.51 psia)]; therefore, it is exempt from the requirements of 40 CFR Part 63, Subpart CC.

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100038 (T201)
Activity Description: Storage of Organic Liquids

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
above-ground external floating roof storage tank with a capacity of 8,000,000 gallons, welded shell construction, a mechanical shoe primary seal, and a rim-mounted secondary seal	OAC rule 3745-31-05 (PTI 03-7095)	0.97 ton of volatile organic compounds (VOC)/yr
	OAC rule 3745-21-09(Z)	see A.I.2.a through A.I.2.g, A.III.1 through A.III.4, and A.IV.1
	40 CFR Part 60, Subpart Kb:	
	40 CFR 60.112b(a)(2)	see A.I.2.h, A.I.2.i, and A.II.2
	40 CFR 60.113b(b)	see A.I.2.j, A.I.2.k, A.II.1, and A.III.5 through A.III.8
	40 CFR 60.115b	see A.III.9, and A.IV. 2 through A.IV.4
	40 CFR 60.116b	see A.III.10, A.III.11, and A.IV.5
	40 CFR Part 63, Subpart CC:	
	40 CFR 63.640(n)(1)	overlap of subpart CC with other regulations for storage vessels - if subject to the provisions of 40 CFR

Part 60, Subpart Kb, required to comply only with the requirements of 40 CFR Part 60, Subpart Kb

2. Additional Terms and Conditions

2.a Any welded external floating roof storage tank equipped with either a 1) liquid-mounted primary seal and rim-mounted secondary seal; or a 2) mechanical shoe primary seal and a rim-mounted secondary seal; or a 3) mechanical shoe primary seal and a shoe-mounted, secondary seal, provided the shoe-mounted secondary seal was installed prior to 1/10/81; or a 4) vapor-mounted primary seal and a rim-mounted secondary seal; or a 5) flexible wiper primary seal and a rim-mounted secondary seal; 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 10.0 square inches per foot of tank diameter; and

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 appropriate Ohio EPA District Office or local air agency 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:

i. a cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use; and

ii. a projection into the tank below the liquid surface.

2.c Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

2.d Any rim vent shall be set to open only at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports.

2.e 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.f Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.g 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.h An external floating roof means a pontoon-type or double-deck type cover that rests on the liquid surface in a vessel with no fixed roof. Each external floating roof must meet the following specifications:

i. Each 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.

(1) The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in section A.II.1, the seal shall completely cover the annular space between the edge of the floating roof and tank wall.

(2) 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 allowed in section A.II.1.

ii. Except for automatic bleeder vents and rim space vents, each opening in a noncontact 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 cover, 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 legs 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.

2.i 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.j If a failure that is detected during inspections required in section A.III.5 cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in 40 CFR 60.115b(b)(4). Such extension request must include 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.

2.k Notify the Administrator 30 days in advance of any gap measurements required by section A.III.5 to afford the Administrator the opportunity to have an observer present.

2.l The storage tank was installed in 1994 with no modifications, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. Make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in the following:

1.a The accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 square centimeters per meter of tank diameter, and the width of any portion of any gap shall not exceed 3.81 cm.

i. One end of the mechanical shoe shall extend into the stored liquid, and the other end shall extend a minimum vertical distance of 61 cm above the stored liquid surface.

ii. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

1.b The secondary seal shall meet the following requirements:

i. The secondary seal shall 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.6.c.

ii. The accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 square centimeters per meter of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm.

iii. There shall be no holes, tears, or other openings in the seal or seal fabric.

2. The permittee shall not place, store, or hold in this external floating roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 76.6 kPa (11.11 psia).

III Monitoring and/or Recordkeeping

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.

   Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

   i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

   ii. For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

      (1) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see

40 CFR 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(2) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

5. 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 frequencies:

5.a Measurements of gaps between the tank wall and the primary seal (seal gaps) shall be performed during the hydrostatic testing of the vessel or within 60 days of the initial fill with VOL and at least once every 5 years thereafter.

5.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 thereafter.

5.c If any emissions unit 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.5.a and A.III.5.b.

6. Determine gap widths and areas in the primary and secondary seals individually by the following procedures:

6.a Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports.

6.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 seal) between the seal and the wall of the storage vessel and measure the circumferential distance of each such location.

6.c The total surface area of each gap described in sections A.III.6.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.

7. 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 sections A.II.1.

8. Visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed.

8.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 the seal fabric, 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 VOL.

8.b For all the inspections required by section A.III.8, the permittee shall notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel to afford the Administrator the opportunity to inspect the storage vessel prior to refilling. If the inspection required by section A.III.8 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. Alternatively, 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.

9. Keep a record of each gap measurement performed as required by sections A.III.5 through A.III.7. Each record shall identify the storage vessel in which the measurement was performed and shall contain:

   a. the date of measurement;

   b. the raw data obtained in the measurement; and

   c. the calculations described in sections A.III.6 and A.III.7.

10. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. These records shall be kept for the life of the emissions unit.

11. The permittee of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements:

11.a Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in section A.III.4.d.

11.b For vessels in which the vapor pressure of the anticipated liquid composition is above 76.6 kPa, an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:

i. ASTM Method D2879-83 (incorporated by reference--see 40 CFR 60.17); or

ii. ASTM Method D323-82 (incorporated by reference--see 40 CFR 60.17); or

iii. as measured by an appropriate method as approved by the Administrator.

IV Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) 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. Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of sections A.I.2.h, A.I.2.i, A.II.1, A.III.6, and A.III.7. This report shall be an attachment to the notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

3. Within 60 days of performing the seal gap measurements required by section A.III.5, furnish the Administrator with a report that contains:

   a. the date of measurement;

   b. the raw data obtained in the measurement; and

   c. the calculations described in sections A.III.6 and A.III.7.

4. After each seal gap measurement that detects gaps exceeding the limitations specified by section A.II.1, submit a report to the Administrator within 30 days of the inspection. The report will identify the vessel and contain the information specified in section A.IV.3 and the date the vessel was emptied or the repairs made and date of repair.

5. The permittee of each storage vessel either with a design capacity greater than or equal to 151 cubic meters storing a liquid with a maximum true vapor pressure that is normally less than 5.2 kPa or with a design capacity greater than or equal to 75 cubic meters but less than 151 cubic meters storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa shall notify the Administrator within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor vapor pressure values for each volume range.

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:

1.a Emission Limitation:

0.97 ton of VOC/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance by working and breathing loss calculations as determined by the U.S. EPA Tanks 4.0 program.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100037 (T202)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof storage tank with a capacity of 9,996 gallons, controlled by a thermal oxidizer	OAC rule 3745-21-09(L)	exempt, see A.I.2.b and A.II.1.
	40 CFR Part 60, Subpart Kb	exempt, see A.I.2.c
	40 CFR Part 63, Subpart CC	see A.I.2.g and A.III.1.
	40 CFR Part 61, Subpart FF	see A.I.2.d through A.I.2.f, and A.III.2. through A.III.4.
	OAC rule 3745-31-05 (PTI 03-7545)	less than 0.1 lb of volatile organic compounds (VOC)/hr

2. Additional Terms and Conditions

2.a The storage tank was installed in 1994 with no modifications, and stores slop oil with a maximum true vapor pressure of 1.50 psia.

This is a Group 2 storage vessel, as defined in 40 CFR 63.641 [i.e., storage vessel at an existing source, capacity less than 177 cubic meter (46,758 gallons), with a stored-liquid maximum true vapor pressure less than 10.4 kPa (1.51 psia)].

2.b This emissions unit is exempt from the requirements of OAC rule 3745-21-09(L)(1), since it is a fixed roof tank with a capacity less than 40,000 gallons. The requirements of

OAC rule 3745-21-09(L)(3) and 3745-21-09(L)(4) are also not applicable since the tank is exempted under OAC rule 3745-21-09(L)(2).

2.c This emissions unit is exempt from the requirements of 40 CFR Part 60, Subpart Kb, since the tank capacity is less than 40 cubic meters (10,568 gallons).

2.d [40 CFR 61.343] Standards: Tanks

i. Except as provided in paragraph (b) of 40 CFR 61.343 and in 40 CFR 61.351, the permittee shall meet the following standards for each tank in which the waste stream is placed in accordance with 40 CFR 61.342 (c)(1)(ii). The standards in this section apply to the treatment of the waste stream in a tank, including dewatering.

(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.

(a) The fixed-roof shall meet the following requirements:

(i) 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) of this subpart.

(ii) 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.

(iii) 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 this section does not apply to any opening that meets all of the following conditions:

1) The purpose of the opening is to provide dilution air to reduce the explosion hazard;

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

3) The pressure is monitored continuously to ensure that the pressure in the tank remains below atmospheric pressure.

(b) The closed-vent system and control device shall be designed and operated in accordance with the requirements of 40 CFR 61.349 of this subpart.

2.e This emissions unit is controlled by the thermal oxidizer which also controls emissions unit P025. Therefore, additional terms and conditions applicable to operation of the thermal oxidizer are shown in the terms and conditions for emissions unit P025.

2.f [40 CFR 61.343(d)]
Except as provided in 40 CFR 61.350 of this subpart, 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.

2.g [40 CFR 63.647(a)]
Each permittee of a Group 1 wastewater stream shall comply with the requirements of 40 CFR 61.340 through 61.355 of 40 CFR part 61, subpart FF for each process wastewater stream that meets the definition in 40 CFR 63.641.

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.

III Monitoring and/or Recordkeeping

1. [40 CFR 63.654(a)]
Each permittee subject to the wastewater provisions in 40 CFR 63.647 shall comply with the record keeping provisions in 40 CFR 61.356 of 40 CFR part 61, subpart FF. There are no additional record keeping requirements for wastewater under this subpart.

2. [40 CFR 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.

If a bypass line exists that could divert the vent stream from the control device, the permittee shall inspect the valve at least once per month to ensure that the vent stream is not diverted through the bypass line. The permittee shall visually inspect the flow monitoring device that is required by 40 CFR 61.349(a)(1)(ii) at least once per operating day to check that vapors are routed to the control device as required.

3. [40 CFR 61.356(g)]
The permittee shall maintain a record for each visual inspection required by 40 CFR 61.343 through 61.347 of this subpart 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.

4. [40 CFR 61.356(h)]
The permittee shall maintain a record for each test of no detectable emissions required by 40 CFR 61.343 through 61.347 and 40 CFR 61.349 of this subpart. 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.

IV Reporting Requirements

1. [40 CFR 63.654(a)]
Each permittee subject to the wastewater provisions in 40 CFR 63.647 shall comply with the reporting provisions in 40 CFR 61.357 of 40 CFR part 61, subpart FF. There are no additional reporting requirements for wastewater under this subpart.

2. [40 CFR 61.357(d)(6)]
Beginning 3 months after the date that the equipment necessary to comply with these standards has been certified in accordance with paragraph (d)(1) of 40 CFR 61.357, the permittee shall submit quarterly to the Administrator a certification that all of the required inspections have been carried out in accordance with the requirements of this subpart.

3. [40 CFR 61.357(d)(8)]
Beginning one year after the date that the equipment necessary to comply with these standards has been certified in accordance with paragraph (d)(1) of 40 CFR 61.357, the permittee shall submit annually to the Administrator a report that summarizes all inspections required by 40 CFR 61.343 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.

V Testing Requirements

1. The permittee shall conduct an annual test of the cover and all openings for no detectable emissions (less than 500 ppmv) using the following test methods and procedures:

1a. [40 CFR 61.355(h)]
The permittee shall test equipment for compliance with no detectable emissions as required in 40 CFR 61.343 of this subpart in accordance with the following requirements:

i. Monitoring shall comply with Method 21 from appendix A of 40 CFR part 60.

ii. The detection instrument shall meet the performance criteria of Method 21.

iii. The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21.

iv. Calibration gases shall be:

(1) Zero air (less than 10 ppm of hydrocarbon in air); and

(2) 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. The background level shall be determined as set forth in Method 21.

vi. The instrument probe shall be traversed around all potential leak interfaces as close as possible to the interface as described in Method 21.

vii. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared to 500 ppm for determining compliance.

2. Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

2.a Emission Limitation:

less than 0.1 lb of VOC/hr

Applicable Compliance Method:

The permittee shall demonstrate compliance by working and breathing loss calculations as determined by the U.S. EPA Tanks 4.0 program, and by using the VOC control efficiency from the most recent compliance testing of the thermal oxidizer.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100036 (T203)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof storage tank with a capacity of 14,500 gallons, controlled by a thermal oxidizer	OAC rule 3745-21-09(L)	exempt, see A.I.2.b and A.II.1.
	40 CFR Part 60, Subpart Kb	see A.I.2.g and A.III.5.
	40 CFR Part 63, Subpart CC	see A.I.2.f and A.III.1.
	40 CFR Part 61, Subpart FF	see A.I.2.d through A.I.2.e, and A.III.2. through A.III.4.
	OAC rule 3745-31-05 (PTI 03-7545)	less than 0.1 lb of volatile organic compounds (VOC)/hr

2. Additional Terms and Conditions

2.a The storage tank was installed in 1994 with no modifications, and stores froth with maximum true vapor pressure of 1.50 psia.

This is a Group 2 storage vessel, as defined in 40 CFR 63.641 [i.e., storage vessel at an existing source, capacity less than 177 cubic meter (46,758 gallons), with a stored-liquid maximum true vapor pressure less than 10.4 kPa (1.51 psia)].

2.b This emissions unit is exempt from the requirements of OAC rule 3745-21-09(L)(1), since it is a fixed roof tank with a capacity less than 40,000 gallons. The requirements of

OAC rule 3745-21-09(L)(3) and 3745-21-09(L)(4) are also not applicable since the tank is exempted under OAC rule 3745-21-09(L)(2).

2.c This emissions unit is controlled by the thermal oxidizer which also controls emissions unit P025. Therefore, additional terms and conditions applicable to operation of the thermal oxidizer are shown in the terms and conditions for emissions unit P025.

2.d [40 CFR 61.343] Standards: Tanks

i. Except as provided in paragraph (b) of 40 CFR 61.343 and in 40 CFR 61.351, the permittee shall meet the following standards for each tank in which the waste stream is placed in accordance with 40 CFR 61.342 (c)(1)(ii). The standards in this section apply to the treatment of the waste stream in a tank, including dewatering.

(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.

(a) The fixed-roof shall meet the following requirements:

(i) 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) of this subpart.

(ii) 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.

(iii) 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 this section does not apply to any opening that meets all of the following conditions:

1) The purpose of the opening is to provide dilution air to reduce the explosion hazard;

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

3) The pressure is monitored continuously to ensure that the pressure in the tank remains below atmospheric pressure.

(b) The closed-vent system and control device shall be designed and operated in accordance with the requirements of 40 CFR 61.349 of this subpart.

2.e [40 CFR 61.343(d)]
Except as provided in 40 CFR 61.350 of this subpart, 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.

2.f [40 CFR 63.647(a)]
Each permittee of a Group 1 wastewater stream shall comply with the requirements of 40 CFR 61.340 through 61.355 of 40 CFR part 61, subpart FF for each process wastewater stream that meets the definition in 40 CFR 63.641.

2.g With the exception of monitoring requirement A.III.5., the requirements in 40 CFR Part 61, Subpart FF are more stringent than the requirements in 40 CFR Part 60, Subpart Kb for this emissions unit.

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.

III Monitoring and/or Recordkeeping

1. [40 CFR 63.654(a)]
Each permittee subject to the wastewater provisions in 40 CFR 63.647 shall comply with the record keeping provisions in 40 CFR 61.356 of 40 CFR part 61, subpart FF. There are no additional record keeping requirements for wastewater under this subpart.

2. [40 CFR 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.

If a bypass line exists that could divert the vent stream from the control device, the permittee shall inspect the valve at least once per month to ensure that the vent stream is not diverted through the bypass line. The permittee shall visually inspect the flow monitoring device that is required by 40 CFR 61.349(a)(1)(ii) at least once per operating day to check that vapors are routed to the control device as required.

3. [40 CFR 61.356(g)]
The permittee shall maintain a record for each visual inspection required by 40 CFR 61.343 through 61.347 of this subpart 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.

4. [40 CFR 61.356(h)]
The permittee shall maintain a record for each test of no detectable emissions required by 40 CFR 61.343 through 61.347 and 40 CFR 61.349 of this subpart. 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.

5. [40 CFR 60.116b] Monitoring of Operations

   a. The permittee shall keep copies of all records required by this section, except for the record required by paragraph (b) of this section, for at least 2 years. The record required by paragraph (b) of this section will be kept for the life of the source.

   b. The permittee of each storage vessel as specified in 40 CFR 60.110b(a) shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. Each storage vessel with a design capacity less than 75 m3 is subject to no provision of this subpart other than those required by this paragraph.

IV Reporting Requirements

1. [40 CFR 63.654(a)]
Each permittee subject to the wastewater provisions in 40 CFR 63.647 shall comply with the reporting provisions in 40 CFR 61.357 of 40 CFR part 61, subpart FF. There are no additional reporting requirements for wastewater under this subpart.

2. [40 CFR 61.357(d)(6)]
Beginning 3 months after the date that the equipment necessary to comply with these standards has been certified in accordance with paragraph (d)(1) of 40 CFR 61.357, the permittee shall submit quarterly to the Administrator a certification that all of the required inspections have been carried out in accordance with the requirements of this subpart.

3. [40 CFR 61.357(d)(8)]
Beginning one year after the date that the equipment necessary to comply with these standards has been certified in accordance with paragraph (d)(1) of 40 CFR 61.357, the permittee shall submit annually to the Administrator a report that summarizes all inspections required by 40 CFR 61.343 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.

V Testing Requirements

1. The permittee shall conduct an annual test of the cover and all openings for no detectable emissions (less than 500 ppmv) using the following test methods and procedures:

1.a [40 CFR 61.355(h)]
The permittee shall test equipment for compliance with no detectable emissions as required in 40 CFR 61.343 of this subpart in accordance with the following requirements:

i. Monitoring shall comply with Method 21 from appendix A of 40 CFR part 60.

ii. The detection instrument shall meet the performance criteria of Method 21.

iii. The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21.

iv. Calibration gases shall be:

(1) Zero air (less than 10 ppm of hydrocarbon in air); and

(2) 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. The background level shall be determined as set forth in Method 21.

vi. The instrument probe shall be traversed around all potential leak interfaces as close as possible to the interface as described in Method 21.

vii. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared to 500 ppm for determining compliance.

2. Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

2.a Emission Limitation:

less than 0.1 lb of VOC/hr

Applicable Compliance Method:

The permittee shall demonstrate compliance by working and breathing loss calculations as determined by U.S. EPA Tanks 4.0 program with a maximum annual material throughput of 2,628,000 gallons, and by using the VOC control efficiency from the most recent compliance testing of the thermal oxidizer.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100032 (T204)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof storage tank with a capacity of 14,500 gallons, controlled by a thermal oxidizer	OAC rule 3745-21-09(L)	exempt, see A.I.2.b and A.II.1.
	40 CFR Part 60, Subpart Kb	see A.I.2.g and A.III.5.
	40 CFR Part 63, Subpart CC	see A.I.2.f and A.III.1.
	40 CFR Part 61, Subpart FF	see A.I.2.d through A.I.2.e, and A.III.2. through A.III.4.
	OAC rule 3745-31-05 (PTI 03-7545)	less than 0.1 lb of volatile organic compounds (VOC)/hr

2. Additional Terms and Conditions

2.a The storage tank was installed in 1994 with no modifications, and stores slop oil with a maximum true vapor pressure of 1.50 psia.

This is a Group 2 storage vessel, as defined in 40 CFR 63.641 [i.e., storage vessel at an existing source, capacity less than 177 cubic meter (46,758 gallons), with a stored-liquid maximum true vapor pressure less than 10.4 kPa (1.51 psia)].

2.b This emissions unit is exempt from the requirements of OAC rule 3745-21-09(L)(1), since it is a fixed roof tank with a capacity less than 40,000 gallons. The requirements of

OAC rule 3745-21-09(L)(3) and 3745-21-09(L)(4) are also not applicable since the tank is exempted under OAC rule 3745-21-09(L)(2).

2.c This emissions unit is controlled by the thermal oxidizer which also controls emissions unit P025. Therefore, additional terms and conditions applicable to operation of the thermal oxidizer are shown in the terms and conditions for emissions unit P025.

2.d [40 CFR 61.343] Standards: Tanks

i. Except as provided in paragraph (b) of 40 CFR 61.343 and in 40 CFR 61.351, the permittee shall meet the following standards for each tank in which the waste stream is placed in accordance with 40 CFR 61.342 (c)(1)(ii). The standards in this section apply to the treatment of the waste stream in a tank, including dewatering.

(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.

(a) The fixed-roof shall meet the following requirements:

(i) 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) of this subpart.

(ii) 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.

(iii) 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 this section does not apply to any opening that meets all of the following conditions:

1) The purpose of the opening is to provide dilution air to reduce the explosion hazard;

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

3) The pressure is monitored continuously to ensure that the pressure in the tank remains below atmospheric pressure.

(b) The closed-vent system and control device shall be designed and operated in accordance with the requirements of 40 CFR 61.349 of this subpart.

2.e [40 CFR 61.343(d)]
Except as provided in 40 CFR 61.350 of this subpart, 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.

2.f [40 CFR 63.647(a)]
Each permittee of a Group 1 wastewater stream shall comply with the requirements of 40 CFR 61.340 through 61.355 of 40 CFR part 61, subpart FF for each process wastewater stream that meets the definition in 40 CFR 63.641.

2.g With the exception of monitoring requirement A.III.5., the requirements in 40 CFR Part 61, Subpart FF are more stringent than the requirements in 40 CFR Part 60, Subpart Kb for this emissions unit.

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.

III Monitoring and/or Recordkeeping

1. [40 CFR 63.654(a)]
Each permittee subject to the wastewater provisions in 40 CFR 63.647 shall comply with the record keeping provisions in 40 CFR 61.356 of 40 CFR part 61, subpart FF. There are no additional record keeping requirements for wastewater under this subpart.

2. [40 CFR 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.

If a bypass line exists that could divert the vent stream from the control device, the permittee shall inspect the valve at least once per month to ensure that the vent stream is not diverted through the bypass line. The permittee shall visually inspect the flow monitoring device that is required by 40 CFR 61.349(a)(1)(ii) at least once per operating day to check that vapors are routed to the control device as required.

3. [40 CFR 61.356(g)]
The permittee shall maintain a record for each visual inspection required by 40 CFR 61.343 through 61.347 of this subpart 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.

4. [40 CFR 61.356(h)]
The permittee shall maintain a record for each test of no detectable emissions required by 40 CFR 61.343 through 61.347 and 40 CFR 61.349 of this subpart. 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.

5. [40 CFR 60.116b] Monitoring of Operations

   a. The permittee shall keep copies of all records required by this section, except for the record required by paragraph (b) of this section, for at least 2 years. The record required by paragraph (b) of this section will be kept for the life of the source.

   b. The permittee of each storage vessel as specified in 40 CFR 60.110b(a) shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. Each storage vessel with a design capacity less than 75 m3 is subject to no provision of this subpart other than those required by this paragraph.

IV Reporting Requirements

1. [40 CFR 63.654(a)]
Each permittee subject to the wastewater provisions in 40 CFR 63.647 shall comply with the reporting provisions in 40 CFR 61.357 of 40 CFR part 61, subpart FF. There are no additional reporting requirements for wastewater under this subpart.

2. [40 CFR 61.357(d)(6)]
Beginning 3 months after the date that the equipment necessary to comply with these standards has been certified in accordance with paragraph (d)(1) of 40 CFR 61.357, the permittee shall submit quarterly to the Administrator a certification that all of the required inspections have been carried out in accordance with the requirements of this subpart.

3. [40 CFR 61.357(d)(8)]
Beginning one year after the date that the equipment necessary to comply with these standards has been certified in accordance with paragraph (d)(1) of 40 CFR 61.357, the permittee shall submit annually to the Administrator a report that summarizes all inspections required by 40 CFR 61.343 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.

V Testing Requirements

1. The permittee shall conduct an annual test of the cover and all openings for no detectable emissions (less than 500 ppmv) using the following test methods and procedures:

1.a [40 CFR 61.355(h)]
The permittee shall test equipment for compliance with no detectable emissions as required in 40 CFR 61.343 of this subpart in accordance with the following requirements:

i. Monitoring shall comply with Method 21 from appendix A of 40 CFR part 60.

ii. The detection instrument shall meet the performance criteria of Method 21.

iii. The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21.

iv. Calibration gases shall be:

(1) Zero air (less than 10 ppm of hydrocarbon in air); and

(2) 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. The background level shall be determined as set forth in Method 21.

vi. The instrument probe shall be traversed around all potential leak interfaces as close as possible to the interface as described in Method 21.

vii. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared to 500 ppm for determining compliance.

2. Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

2.a Emission Limitation:

less than 0.1 lb of VOC/hr

Applicable Compliance Method:

The permittee shall demonstrate compliance by working and breathing loss calculations as determined by U.S. EPA Tanks 4.0 program, and by using the VOC control efficiency from the most recent compliance testing of the thermal oxidizer.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100320 (T205)
Activity Description: Storage of Petroleum Liquids

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
above ground external floating roof storage tank with a capacity of 13,649,234 gallons (welded shell construction, liquid-mounted, resilient foam-filled primary seal, rim-mounted, flexible wiper secondary seal)	OAC rule 3745-21-09 (Z)	see A.I.2.a-g, A.III.1-4, and A.IV.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e) and (f)	see A.III.5.
	40 CFR 63.646	see A.II.1-3

2. Additional Terms and Conditions

2.a Any welded external floating roof storage tank equipped with a liquid-mounted primary seal and rim-mounted secondary seal, a mechanical shoe primary seal and a rim-mounted secondary seal, a mechanical shoe primary seal and a shoe-mounted, secondary seal, and the shoe-mounted secondary seal was installed prior to 1/10/81, a vapor-mounted primary seal and a rim-mounted secondary seal, and the vapor-mounted primary seal was installed prior to 1/01/81, or a flexible wiper primary seal and a rim-mounted secondary seal, and the flexible wiper primary seal was installed prior to 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 10.0 square inches 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 appropriate Ohio EPA District Office or local air agency 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:

i. A cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use.

ii. A projection into the tank below the liquid surface.

2.c Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

2.d Any rim vent shall be set to open at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports.

2.e 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.f Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.g 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.h The storage tank was installed in 1968 with no modifications, and stores crude oil with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

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.

   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. Each 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 Director (the appropriate Ohio EPA District Office or local air agency) 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.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100321 (T206)
Activity Description: Storage of Petroleum Liquids

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
above ground external floating roof storage tank with a capacity of 13,649,234 gallons (welded shell construction, mechanical shoe primary seal, rim-mounted, flexible wiper secondary seal)	OAC rule 3745-21-09 (Z)	see A.I.2.a-g, A.III.1-4, and A.IV.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e) and (f)	see A.III.5.
	40 CFR 63.646	see A.II.1-3

2. Additional Terms and Conditions

2.a Any welded external floating roof storage tank equipped with a liquid-mounted primary seal and rim-mounted secondary seal, a mechanical shoe primary seal and a rim-mounted secondary seal, a mechanical shoe primary seal and a shoe-mounted, secondary seal, and the shoe-mounted secondary seal was installed prior to 1/10/81, a vapor-mounted primary seal and a rim-mounted secondary seal, and the vapor-mounted primary seal was installed prior to 1/01/81, or a flexible wiper primary seal and a rim-mounted secondary seal, and the flexible wiper primary seal was installed prior to 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 10.0 square inches 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 appropriate Ohio EPA District Office or local air agency 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:

i. A cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use.

ii. A projection into the tank below the liquid surface.

2.c Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

2.d Any rim vent shall be set to open at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports.

2.e 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.f Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.g 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.h The storage tank was installed in 1968 with no modifications, and stores crude oil with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

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.

   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. Each 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 Director (the appropriate Ohio EPA District Office or local air agency) 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.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100322 (T207)
Activity Description: Storage of Petroleum Liquids

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
above ground external floating roof storage tank with a capacity of 13,649,234 gallons (welded shell construction, liquid-mounted, resilient foam-filled primary seal, rim-mounted, flexible wiper secondary seal)	OAC rule 3745-21-09 (Z)	see A.I.2.a-g, A.III.1-4, and A.IV.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e) and (f)	see A.III.5.
	40 CFR 63.646	see A.II.1-3

2. Additional Terms and Conditions

2.a Any welded external floating roof storage tank equipped with a liquid-mounted primary seal and rim-mounted secondary seal, a mechanical shoe primary seal and a rim-mounted secondary seal, a mechanical shoe primary seal and a shoe-mounted, secondary seal, and the shoe-mounted secondary seal was installed prior to 1/10/81, a vapor-mounted primary seal and a rim-mounted secondary seal, and the vapor-mounted primary seal was installed prior to 1/01/81, or a flexible wiper primary seal and a rim-mounted secondary seal, and the flexible wiper primary seal was installed prior to 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 10.0 square inches 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 appropriate Ohio EPA District Office or local air agency 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:

i. A cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use.

ii. A projection into the tank below the liquid surface.

2.c Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

2.d Any rim vent shall be set to open at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports.

2.e 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.f Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.g 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.h The storage tank was installed in 1968 with no modifications, and stores crude oil with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

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.

   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. Each 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 Director (the appropriate Ohio EPA District Office or local air agency) 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.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100323 (T208)
Activity Description: Storage of Petroleum Liquids

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
above ground external floating roof storage tank with a capacity of 13,649,234 gallons (welded shell construction, mechanical shoe primary seal, rim-mounted, flexible wiper secondary seal)	OAC rule 3745-21-09 (Z)	see A.I.2.a-g, A.III.1-4, and A.IV.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e) and (f)	see A.III.5.
	40 CFR 63.646	see A.II.1-3

2. Additional Terms and Conditions

2.a Any welded external floating roof storage tank equipped with a liquid-mounted primary seal and rim-mounted secondary seal, a mechanical shoe primary seal and a rim-mounted secondary seal, a mechanical shoe primary seal and a shoe-mounted, secondary seal, and the shoe-mounted secondary seal was installed prior to 1/10/81, a vapor-mounted primary seal and a rim-mounted secondary seal, and the vapor-mounted primary seal was installed prior to 1/01/81, or a flexible wiper primary seal and a rim-mounted secondary seal, and the flexible wiper primary seal was installed prior to 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 10.0 square inches 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 appropriate Ohio EPA District Office or local air agency 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:

i. A cover, seal or lid which remains in the closed position at all times without any visible gaps, except when the opening is in actual use.

ii. A projection into the tank below the liquid surface.

2.c Any automatic bleeder vent shall remain in the closed position, except when the external floating roof is floated off or landed on the roof leg supports.

2.d Any rim vent shall be set to open at the manufacturer's recommended setting, except when the external floating roof is being floated off the roof leg supports.

2.e 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.f Any stub drain shall be equipped with a projection into the tank below the liquid surface.

2.g 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.h The storage tank was installed in 1968 with no modifications, and stores crude oil with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

1. 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.

2. 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.

3. 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.

III Monitoring and/or Recordkeeping

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.

   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. Each 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 Director (the appropriate Ohio EPA District Office or local air agency) 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.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 164627 (T209)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof storage tank with a capacity of 11,291 gallons	OAC rule 3745-21-09(L)(2)(a)	exempt see A.I.2.a
	40 CFR Part 63, Subpart CC	exempt see A.I.2.b

2. Additional Terms and Conditions

2.a This emissions unit is exempt from the requirements of OAC rule 3745-21-09(L)(1) because it is a fixed roof storage tank with a capacity less than 40,000 gallons.

2.b The storage tank was installed in 1949 with no modifications, and stores organic liquids with a maximum true vapor pressure of 1.50 psia.

This is a Group 2 storage vessel, as defined in 40 CFR 63.641[i.e., storage vessel at an existing source with a stored-liquid maximum true vapor pressure less than 10.4 kPa (1.51 psia)]; therefore, it is exempt from the requirements of 40 CFR Part 63, Subpart CC.

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 104647 (T210)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof storage tank with a capacity of 22,326 gallons	OAC rule 3745-21-09(L)(2)(a)	exempt see A.I.2.a
	40 CFR Part 63, Subpart CC	exempt see A.I.2.b

2. Additional Terms and Conditions

2.a This emissions unit is exempt from the requirements of OAC rule 3745-21-09(L)(1) because it is a fixed roof storage tank with a capacity less than 40,000 gallons.

2.b The storage tank was installed in 1960 with no modifications, and stores organic liquids with a maximum true vapor pressure of 1.50 psia.

This emissions unit is a Group 2 storage vessel, as defined in 40 CFR 63.641[i.e., storage vessel at an existing source with a stored-liquid maximum true vapor pressure less than 10.4 kPa (1.51 psia)]; therefore, it is exempt from the requirements of 40 CFR Part 63, Subpart CC.

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100277 (T211)
Activity Description: Storage of Petroleum Liquids

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
above-ground, fixed roof storage tank with a capacity of 30,576 gallons	OAC rule 3745-21-09(L)(2)(a)	exempt see A.I.2.a
	40 CFR Part 63, Subpart CC	exempt see A.I.2.b

2. Additional Terms and Conditions

2.a This emissions unit is exempt from the requirements of OAC rule 3745-21-09(L)(1) because it is a fixed roof storage tank with a capacity less than 40,000 gallons.

2.b The storage tank was installed in 1968 with no modifications, and stores organic liquids with a maximum true vapor pressure of 1.50 psia.

This is a Group 2 storage vessel, as defined in 40 CFR 63.641[i.e., storage vessel at an existing source with a stored-liquid maximum true vapor pressure less than 10.4 kPa (1.51 psia)]; therefore, it is exempt from the requirements of 40 CFR Part 63, Subpart CC.

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100072 (T212)
Activity Description: Storage of Organic Liquids

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
above ground internal floating roof tank (592,178 gallons)	OAC rule 3745-21-09 (L)	see A.I.2.a through A.I.2.d and A.III.1
	40 CFR 60 Subpart Kb	
	40 CFR 60.112b	see A.I.2.e through A.I.2.m
	40 CFR 60.113b	see A.III.2 through A.III.5 and A.IV.1
	40 CFR 60.115b	see A.III.6, A.III.7, and A.IV.2 through A.IV.4
	40 CFR 60.116b	see A.III.8 through A.III.10, and A.IV.5
	40 CFR 61 Subpart FF	Control requirements, monitoring and/or record keeping requirements, and reporting requirements are satisfied by the requirements in 40 CFR 60 Subpart Kb
	40 CFR 63 Subpart CC	
	40 CFR 63.640(n)(1)	Overlap of subpart CC with other regulations for storage vessels - if

subject to the provisions of 40 CFR subpart Kb, required to comply only with the requirements of 40 CFR subpart Kb

2. Additional Terms and Conditions

2.a The maximum true vapor pressure of organic liquid stored in this storage tank shall not exceed 11.1 psia.

2.b The fixed roof storage tank shall be equipped with an internal floating roof.

2.c 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.d All openings, except stub drains, shall be equipped with a cover, seal or lid, which is in the closed position at all times, except when in actual use for tank gauging or sampling.

2.e The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

2.f Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

i. A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.

ii. 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.

iii. A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is

connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

2.g Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

2.h Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

2.i Automatic bleeder vents shall be equipped with a gasket and 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.j Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

2.k Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

2.l Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

2.m Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

2.n The storage tank was installed in 1985 and modified on June 1, 1992, and stores organic liquids with a maximum true vapor pressure of 11.1 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), stored-liquid maximum true vapor pressure greater than or equal to 10.4 kPa (1.51 psia), and annual average HAP concentration greater than 4% by weight total organic HAP).

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

1.a The types of petroleum liquids stored in the tank.

1.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.

Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

ii. For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(1) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(2) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(1) May be obtained from standard reference texts, or

(2) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or

(3) Measured by an appropriate method approved by the Administrator; or

(4) Calculated by an appropriate method approved by the Administrator.

2. Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the permittee shall repair the items before filling the storage vessel.

3. For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in A.IV.3. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

4. For vessels equipped with a double-seal system as specified in A.I.2.f.ii.:

4.a Visually inspect the vessel as specified in A.III.5. at least every 5 years; or

4.b Visually inspect the vessel as specified in A.III.3.

5. Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal 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 surfaces 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 refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in A.III.3 and A.III.4.b and at intervals no greater than 5 years in the case of vessels specified in A.III.4.a.

6. The permittee shall keep copies of all reports and records required in A.IV.2, A.IV.3, and A.IV.4, for at least 2 years.

7. Keep a record of each inspection performed as required by A.III.2, A.III.3, A.III.4, and A.III.5. Each record shall identify the storage vessel on which the inspection was performed and shall

contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

8. The permittee shall keep copies of all records required by A.III.2 through A.III.10, excluding A.III.9, for at least 2 years.

9. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel (shall be kept for the life of the source).

10. The permittee of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements.

10.a Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in A.III.1.b.

10.b For vessels in which the vapor pressure of the anticipated liquid composition is above 76.6 kPa (11.1 psia), an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:

i. ASTM Method D2879-83 (incorporated by reference--see 40 CFR. 60.17); or

ii. ASTM Method D323-82 (incorporated by reference--see 40 CFR 60.17); or

iii. As measured by an appropriate method as approved by the Administrator.

IV Reporting Requirements

1. Notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by A.III.2 and A.III.5 to afford the Administrator the opportunity to have an observer present. If the inspection required by A.III.5 is not planned and the permittee could not have known about the inspection 30 days in advance or 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. Alternatively, 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.

2. Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of A.I.2.e through A.I.2.m and A.III.2. This report shall be an attachment to the notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

3. If any of the conditions described in A.III.3 are detected during the annual visual inspection required by A.III.3, a report shall be furnished to the Administrator within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

4. After each inspection required by A.III.4 that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in A.III.4.b, a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of A.I.2.e through A.I.2.m or A.III.4 and list each repair made.

5. The permittee of each storage vessel either with a design capacity greater than or equal to 151 cubic meters storing a liquid with a maximum true vapor pressure that is normally less than 5.2 kPa (0.75 psia) or with a design capacity greater than or equal to 75 cubic meters but less than 151 cubic meters storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa (4.0 psia) shall notify the Administrator within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100481 (T213)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof tank with a capacity of 70,476 gallons	OAC rule 3745-21-09(L)	exempt, see A.II.1
	40 CFR Part 60, Subpart Ka	see A.III.2 through A.III.5
	40 CFR Part 63, Subpart CC	see A.I.2.a and A.II.1

2. Additional Terms and Conditions

2.a The storage tank was installed in 1979 with no modifications, and stores organic liquids with a maximum true vapor pressure of 1.50 psia.

Based on the operational restriction in A.II.1, this storage tank is a Group 2 storage vessel, as defined in 40 CFR 63.641 [storage vessel at an existing source with a stored-liquid maximum true vapor pressure less than 10.4 kPa (1.51 psia)]; therefore, it is exempt from the requirements of 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.

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

   a. The types of petroleum liquids stored in the tank.

   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. Each 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.

2. Except as provided in section A.III.5, the permittee shall maintain a record of each petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period.

3. Available data on the typical Reid vapor pressure and the maximum expected storage temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517, unless the Administrator or Director specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

4. The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa (2.0 psia) or whose physical properties preclude determination by the recommended method is to be determined from available data and recorded if the estimated true vapor pressure is greater than 6.9 kPa (1.0 psia).

5. The permittee is exempt from the requirements of sections A.III.2 through A.III.4 if the storage tank stores only petroleum liquids with Reid vapor pressures of less than 6.9 kPa (1.0 psia), provided the maximum true vapor pressures of the pertroleum liquids do not exceed 6.9 kPa (1.0 psia).

IV Reporting Requirements

1. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100482 (T214)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof tank with a capacity of 70,476 gallons	OAC rule 3745-21-09(L)	exempt, see A.II.1
	40 CFR Part 60, Subpart Ka	see A.III.2 through A.III.5
	40 CFR Part 63, Subpart CC	see A.I.2.a and A.II.1

2. Additional Terms and Conditions

2.a The storage tank was installed in 1979 with no modifications, and stores organic liquids with a maximum true vapor pressure of 1.50 psia.

Based on the operational restriction in A.II.1, this storage tank is a Group 2 storage vessel, as defined in 40 CFR 63.641 [storage vessel at an existing source with a stored-liquid maximum true vapor pressure less than 10.4 kPa (1.51 psia)]; therefore, it is exempt from the requirements of 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.

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

   a. The types of petroleum liquids stored in the tank.

   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. Each 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.

   Except as provided in section A.III.5, the permittee shall maintain a record of each petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period.

3. Available data on the typical Reid vapor pressure and the maximum expected storage temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517, unless the Administrator or Director specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

4. The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa (2.0 psia) or whose physical properties preclude determination by the recommended method is to be determined from available data and recorded if the estimated true vapor pressure is greater than 6.9 kPa (1.0 psia).

5. The permittee is exempt from the requirements of sections A.III.2 through A.III.4 if the storage tank stores only petroleum liquids with Reid vapor pressures of less than 6.9 kPa (1.0 psia), provided the maximum true vapor pressures of the pertroleum liquids do not exceed 6.9 kPa (1.0 psia).

IV Reporting Requirements

1. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100432 (T215)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof storage tank with a capacity of 31,276 gallons	OAC rule 3745-21-09(L)(2)(a)	exempt see A.I.2.a
	40 CFR Part 63, Subpart CC	exempt see A.I.2.b

2. Additional Terms and Conditions

2.a This emissions unit is exempt from the requirements of OAC rule 3745-21-09(L)(1) because it is a fixed roof storage tank with a capacity less than 40,000 gallons.

2.b The storage tank was installed in 1950 with no modifications, and stores organic liquids with a maximum true vapor pressure of 1.50 psia.

This emissions unit is a Group 2 storage vessel, as defined in 40 CFR 63.641[i.e., storage vessel at an existing source with a stored-liquid maximum true vaport pressure less than 10.4 kPa (1.51 psia)]; therefore, it is exempt from the requirements of 40 CFR Part 63, Subpart CC.

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 100434 (T216)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof storage tank with a capacity of 31,276 gallons	OAC rule 3745-21-09(L)(2)(a)	exempt see A.I.2.a
	40 CFR Part 63, Subpart CC	exempt see A.I.2.b

2. Additional Terms and Conditions

2.a This emissions unit is exempt from the requirements of OAC rule 3745-21-09(L)(1) because it is a fixed roof storage tank with a capacity less than 40,000 gallons.

2.b The storage tank was installed in 1950 with no modifications, and stores organic liquids with a maximum true vapor pressure of 1.50 psia.

This emissions unit is a Group 2 storage vessel, as defined in 40 CFR 63.641[i.e., storage vessel at an existing source with a stored-liquid maximum true vaport pressure less than 10.4 kPa (1.51 psia)]; therefore, it is exempt from the requirements of 40 CFR Part 63, Subpart CC.

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 164468 ("E-tank") (T217)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof tank with a capacity of 4,478,655 gallons, controlled by a thermal oxidizer	OAC rule 3745-21-09(L)	exempt, see A.II.1.
	40 CFR Part 60, Subpart Ka	see A.III.2 through A.III.5.
	40 CFR Part 63, Subpart CC	see A.I.2.b, A.I.2.f and A.III.7.
	40 CFR Part 61, Subpart FF	see A.I.2.c through A.I.2.d, and A.III.6., and A.III.8 through A.III.9

2. Additional Terms and Conditions

2.a The storage tank was installed in 1982 with no modifications, and stores refinery wastewater with a maximum true vapor pressure of 1.50 psia.

This is a Group 1 storage vessel (at an existing source, capacity greater than or equal 177 cubic meters (46,758 gallons), with annual average HAP concentration greater than 4% by weight total organic HAP).

2.b [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 this subpart.

2.c [40 CFR 61.343] Standards: Tanks

i. Except as provided in paragraph (b) of this section and in 40 CFR 61.351, the permittee shall meet the following standards for each tank in which the waste stream is placed in accordance with 40 CFR 61.342 (c)(1)(ii). The standards in this section apply to the treatment of the waste stream in a tank, including dewatering.

(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.

(a) The fixed-roof shall meet the following requirements:

(i) 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) of this subpart.

(ii) 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.

(iii) 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 this section does not apply to any opening that meets all of the following conditions:

1) The purpose of the opening is to provide dilution air to reduce the explosion hazard;

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

3) The pressure is monitored continuously to ensure that the pressure in the tank remains below atmospheric pressure.

(b) The closed-vent system and control device shall be designed and operated in accordance with the requirements of 40 CFR 61.349 of this subpart.

2.d [40 CFR 61.343(d)]
Except as provided in 40 CFR 61.350 of this subpart, 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.

2.e [40 CFR 63.647(a)]
Each permittee of a Group 1 wastewater stream shall comply with the requirements of 40 CFR 61.340 through 61.355 of 40 CFR part 61, subpart FF for each process wastewater stream that meets the definition in 40 CFR 63.641.

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.

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

   a. The types of petroleum liquids stored in the tank.

   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. Each 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.

   Except as provided in section A.III.5, the permittee shall maintain a record of each petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period.

3. Available data on the typical Reid vapor pressure and the maximum expected storage temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517, unless the Administrator or Director specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

4. The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa (2.0 psia) or whose physical properties preclude determination by the recommended method is to be determined from available data and recorded if the estimated true vapor pressure is greater than 6.9 kPa (1.0 psia).

5. The permittee is exempt from the requirements of sections A.III.2 through A.III.4 if the storage tank stores only petroleum liquids with Reid vapor pressures of less than 6.9 kPa (1.0 psia), provided the maximum true vapor pressures of the pertroleum liquids do not exceed 6.9 kPa (1.0 psia).

6. [40 CFR 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.

   If a bypass line exists that could divert the vent stream from the control device, the permittee shall inspect the valve at least once per month to ensure that the vent stream is not diverted through the bypass line. The permittee shall visually inspect the flow monitoring device that is required by 40 CFR 61.349(a)(1)(ii) at least once per operating day to check that vapors are routed to the control device as required.

7. [40 CFR 63.654(a)]
Each permittee subject to the wastewater provisions in 40 CFR 63.647 shall comply with the record keeping provisions in 40 CFR 61.356 of 40 CFR part 61, subpart FF. There are no additional record keeping requirements for wastewater under this subpart.

8. [40 CFR 61.356(g)]
The permittee shall maintain a record for each visual inspection required by 40 CFR 61.343 through 61.347 of this subpart 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.

9. [40 CFR 61.356(h)]
The permittee shall maintain a record for each test of no detectable emissions required by 40 CFR 61.343 through 61.347 and 40 CFR 61.349 of this subpart. 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.

IV Reporting Requirements

1. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

2. [40 CFR 63.654(a)]
Each permittee subject to the wastewater provisions in 40 CFR 63.647 shall comply with the reporting provisions in 40 CFR 61.357 of 40 CFR part 61, subpart FF. There are no additional reporting requirements for wastewater under this subpart.

3. [40 CFR 61.357(d)(6)]
Beginning 3 months after the date that the equipment necessary to comply with these standards has been certified in accordance with paragraph (d)(1) of this section, the permittee shall submit quarterly to the Administrator a certification that all of the required inspections have been carried out in accordance with the requirements of this subpart.

4. [40 CFR 61.357(d)(8)]
Beginning one year after the date that the equipment necessary to comply with these standards has been certified in accordance with paragraph (d)(1) of this section, the permittee shall submit annually to the Administrator a report that summarizes all inspections required by 40 CFR 61.343 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.

V Testing Requirements

1. The permittee shall conduct an annual test of the cover and all openings for no detectable emissions (less than 500 ppmv) using the following test methods and procedures:

1.a [40 CFR 61.355(h)]
The permittee shall test equipment for compliance with no detectable emissions as required in 40 CFR 61.343 of this subpart in accordance with the following requirements:

i. Monitoring shall comply with Method 21 from appendix A of 40 CFR part 60.

ii. The detection instrument shall meet the performance criteria of Method 21.

iii. The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21.

iv. Calibration gases shall be:

(1) Zero air (less than 10 ppm of hydrocarbon in air); and

(2) 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. The background level shall be determined as set forth in Method 21.

vi. The instrument probe shall be traversed around all potential leak interfaces as close as possible to the interface as described in Method 21.

vii. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared to 500 ppm for determining compliance.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 330 (T218)
Activity Description: Storage of Organic Liquids

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
above ground fixed roof tank (108,324 gallons)	OAC rule 3745-21-09 (L)	none, see A.II.1
	40 CFR 63 Subpart CC:	
	40 CFR 63.642(e)	see A.III.2
	40 CFR 63.646	see A.II.1, A.III.1, and A.IV.1

2. Additional Terms and Conditions

2.a The storage tank was installed in 1969 with no modifications, and stores organic liquids with a maximum true vapor pressure of 1.49 psia.

This is a Group 2 storage vessel (at an existing source, and the stored-liquid maximum true vapor pressure is less than 10.4 kPa (1.51 psia)).

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 or equal to 10.4 kPa (1.51 psia).

III Monitoring and/or Recordkeeping

1. The permittee shall maintain records of the following information:

   a. The types of petroleum liquids stored in the tank.

   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. Each 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. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 1.51 pounds per square inch absolute, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tank 164242 (T219)
Activity Description: Storage of Organic Liquids

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
above-ground, fixed roof storage tank with a capacity of 22,000 gallons	OAC rule 3745-21-09(L)(2)(a)	exempt see A.I.2.a
	40 CFR Part 63, Subpart CC	exempt see A.I.2.b

2. Additional Terms and Conditions

2.a This emissions unit is exempt from the requirements of OAC rule 3745-21-09(L)(1) because it is a fixed roof storage tank with a capacity less than 40,000 gallons.

2.b The storage tank was installed in 1974 with no modifications, and stores organic liquids with a maximum true vapor pressure of 1.50 psia.

This emissions unit is a Group 2 storage vessel, as defined in 40 CFR 63.641[i.e., storage vessel at an existing source with a stored-liquid maximum true vaport pressure less than 10.4 kPa (1.51 psia)]; therefore, it is exempt from the requirements of 40 CFR Part 63, Subpart CC.

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None