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

11/20/03

RE: Proposed Title V Chapter 3745-77 Permit
15-76-00-0301
Marathon Ashland Petroleum LLC, Canton Refinery

Attn: Genevieve Damico AR-18J
United States Environmental Protection Agency
Region V
77 West Jackson Blvd.
Chicago, IL 60604-3590

Dear Ms. Damico:

The proposed issuance of the Title V permit for Marathon Ashland Petroleum LLC, Canton Refinery, has been created in Ohio EPA's State Air Resources System (STARS) on 11/20/03, for review by USEPA. This proposed action is identified in STARS as 3-Title V Proposed Permit T+C covering the facility specific terms and conditions, and Title V Proposed Permit covering the general terms and conditions. This proposed permit will be processed for issuance as a final action after forty-five (45) days from USEPA's receipt of this certified letter if USEPA does not object to the proposed permit. Please contact me at (614) 644-3631 by the end of the forty-five (45) day review period if you wish to object to the proposed permit.

Very truly yours,

Michael W. Ahern

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

cc: Canton Division of Air Pollution Control
File, DAPC PMU

State of Ohio Environmental Protection Agency

PROPOSED TITLE V PERMIT

Issue Date: 11/20/03	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: 15-76-00-0301 to:
Marathon Ashland Petroleum LLC, Canton Refinery
2408 Gambrinus Avenue SW
Canton, OH 44706

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

B015 (Crude Heater)
Crude Heater 4-0-B-6; Refinery Fuel Gas Process Heat Exchanger

B016 (D.O.T. Heater)
D.O.T. Heater 4-2-B-1; Refinery Fuel Gas Process Heat Exchanger

B019 (FCC Charge Heaters)
FCC Charge Heaters 4-2-B-5,-6; Refinery Fuel Gas Heat Exchanger

B020 (Vacuum Heater)
Vacuum Heater (Reduced Crude) 4-4-B-1; Refinery Fuel Gas Process Heat Exchanger

B021 (Iso-Stripper Heater)
Iso-Stripper Heater 4-27-B-1; Refinery Fuel Gas Process Heat Exchanger

B022 (HDS Charge Heater)
HDS Charge Heater 4-32-B-1; Refinery Fuel Gas/No. 6 Oil Process Heat Exchanger

B023 (NPT Heater)
NPT Heater 4-30-B-1; Refinery Fuel Gas Process Heat Exchanger

B024 (No. 1 Boiler)
No. 1 Boiler 4-16-B-1; Refinery Fuel Gas/No. 6 Oil Process Heat Exchanger

B025 (No. 2 Boiler)
No. 2 Boiler 4-16-B-2; Refinery Fuel Gas/No. 6 Oil Process Heat Exchanger

B026 (No. 11 Boiler)
No. 11 Boiler 4-16-B-11; Refinery Fuel Gas/No. 6 Oil Process Heat Exchanger

B027 (No. 12 Boiler)
No. 12 Boiler 4-16-B-12; Refinery Fuel Gas Process Heat Exchanger

B028 (CCR Stabilizer Reboiler)
CCR Stabilizer Reboiler 4-33-B-5; Refinery Fuel Gas Process Heat Exchanger

B029 (CCR Charge Heaters)
CCR Charge Heaters 4-33-B-1,-2,-3,-4; Refinery Fuel Gas Process Heat Exchanger

P002 (FCC Unit)
FCC Unit 4-7; Fluidized Catalytic Cracking Unit

P003 (North Area Flare)
North Area Flare 4-14-B-2; Emergency Relief and Vapor Blow Area (Flare)

P004 (South Area Flare)
South Area Flare 4-14-B-1; Emergency Relief and Vapor Blow Area (Flare)

P007 (Asphalt Oxidizer with Thermal Afterburner)
Asphalt Oxidizer with Thermal Afterburner

P009 (API Separator)
API Separator 4-14-L-258; Oil/Water Separator; New Covers installed 10/00

P010 (CCR Regenerator Vent)
CCR Regenerator Vent

P011 (No. 2 Sulfur Recovery Unit and Thermal Oxidizer)
No. 2 Sulfur Recovery Unit and Thermal Oxidizer 4-34

P013 (Refinery-Wide Fugitive VOC Emissions)
Refinery Fugitive VOC Emissions; Facility-Wide Organic Compound Fugitive Leaks

P016 (No. 3 Sulfur Recovery Unit)
No. 3 Sulfur Recovery Unit 4-38

T023 (Tank 40)
4-6-TK-40; 2,100,000 gal Petroleum Liquid lnternal Floating Roof Storage Tank

T024 (Tank 45)
4-6-TK-45; 2,100,000 gal Petroleum Liquid Internal Floating Roof Storage Tank

T028 (Tank 50)
4-6-TK-50; 2,284,380 gal Petroleum Liquid Internal Floating Roof Storage Tank

T030 (Tank 56)
4-6-TK-56; 835,254 gal Petroleum Liquid External Floating Roof Storage Tank

T033 (Tank 61)
4-6-TK-61; 418,530 gal Petroleum Liquid Internal Floating Roof Storage Tank

T036 (Tank 66)
4-6-TK-66; 1,004,010 gal Petroleum Liquid External Floating Roof Storage Tank

T037 (Tank 67)
4-6-TK-67; 1,004,010 gal Petroleum Liquid Internal Floating Roof Storage Tank

T038 (Tank 68)
4-6-TK-68; 2,100,000 gal Petroleum Liquid External Floating Roof Storage Tank

T039 (Tank 74)
4-6-TK-74; 2,100,000 gal Petroleum Liquid External Floating Roof Storage Tank

T040 (Tank 117)
4-6-TK-117; 505,848 gal Petroleum Liquid Internal Floating Roof Storage Tank

T041 (Tank 214)
4-6-TK-214; 6,090,000 gal Petroleum Liquid Internal Floating Roof Storage Tank

T043 (Tank 225)
4-6-TK-225; 1,849,638 gal Petroleum Liquid Internal Floating Roof Storage Tank

T044 (Tank 232)
4-6-TK-232; 6,090,000 gal Petroleum Liquid Internal Floating Roof Storage Tank

T046 (Tank 52)
4-6-TK-52; 4,031,034 gal Petroleum Liquid External Floating Roof Storage Tank

T047 (Tank 71)
4-6-TK-71; 532,350 gal Petroleum Liquid External Floating Roof Storage Tank

T048 (Tank 72)
4-6-TK-72; 533,526 gal Petroleum Liquid External Floating Roof Storage Tank

T050 (Tank 119)
4-6-TK-119; 974,862 gal Petroleum Liquid Internal Floating Roof Storage Tank

T051 (Tank 239)
4-6-TK-239; 840,000 gal Petroleum Liquid Internal Floating Roof Storage Tank

T067 (Tank 73)
4-6-TK-73; 533,946 gal Petroleum Liquid External Floating Roof Storage Tank

T102 (Tank 8)
4-14-TK-8; 546,000 gal Waste Water Surge Fixed Roof Storage Tank (Permit withdrawn by Ohio EPA)

T142 (Tank 240)
4-6-TK-240; 1,344,000 gal Petroleum Liquid Internal Floating Roof Storage Tank

T143 (Tank 242)
4-6-TK-242; 1,944,180 gal Petroleum Liquid Internal Floating Roof Storage Tank

T144 (Tank 243)
4-6-TK-243; 1,260,000 gal Petroleum Liquid Internal Floating Roof Storage Tank

T145 (Tank 1)
4-14-TK-1; 3,999,996 gal Stormwater External Floating Roof Storage Tank

T146 (Tank 2)
4-14-TK-2; 3,999,996 gal Stormwater External Floating Roof Storage Tank

T148 (Tank 244)
4-6-TK-244; 1,176,000 gal Petroleum Liquid Internal Floating Roof Storage Tank

T149 (Tank 245)
4-6-TK-245; 1,176,000 gal Petroleum Liquid Internal Floating Roof Storage Tank

T153 (Tank 246)
4-14-TK-246; 39,760 gal Petroleum Liquid Fixed Roof Storage Tank

T154 (Tank 247)
4-14-TK-247; 39,760 gal Petroleum Liquid Fixed Roof Storage Tank

T162 (Tank 251)
4-20-TK-251; 550,200 gal Petroleum Liquid Internal Floating Roof Storage Tank

T167 (Tank 253)
4-20-TK-253; 550,200 gal Petroleum Liquid Internal Floating Roof Storage Tank

T169 (Tank 62)
4-6-TK-62; 361,116 gal Petroleum Liquid Internal Floating Roof Storage Tank; Was permitted as Source No. T034.

T175 (Tank 254)
4-6-TK-254; 533,400 gal Petroleum Liquid Internal Floating Roof Storage Tank. Originally permitted as T168, which expired prior to construction.

T177 (Tank 267)
4-6-TK-267; 1,260,000 gal Sweet Naphtha CCR Charge

Z016 (South Area Cooling Towers)
4-15-CT-1 and 4-15-CT-2; South Area Cooling Towers

Z017 (North Area Cooling Towers)
4-15-CT-3 and 4-15-CT-4; North Area Cooling Towers

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

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

Canton Division of Air Pollution Control
420 Market Avnue N.
Canton, OH 44702-1544
(330) 489-3385

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 - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Section

XXI. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
general MACT provisions	40 CFR Part 63, Subpart A	See sections A.I.2.a and A.I.2.b.
equipment leak provisions	40 CFR Part 63, Subpart CC, 40 CFR Part 60, Subpart GGG, and 40 CFR Part 60, Subpart VV OAC rule 3745-21-09(T)	See sections A.I.2.c through A.I.2.e.
general storage vessel provisions	40 CFR Part 63, Subpart CC	See section A.I.2.f.
miscellaneous process vent provisions	40 CFR Part 63, Subpart CC	See section A.I.2.i.
process unit turnarounds	OAC rule 3745-21-09(M)(3)	See section A.I.2.k.
site remediation activities	40 CFR Part 63, Subpart GGGGG	See section A.I.2.p.

2. Additional Terms and Conditions

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

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

2.c [63.648(a)] - Equipment Leaks
In accordance with 40 CFR Part 63, Subpart CC, the permittee shall comply with the applicable provisions of 40 CFR Part 60, Subpart VV and paragraph (b) of 40 CFR Part 63.648 except as provided in paragraphs 2.c.i., 2.c.ii. of this section, and (c) through (i) of 40 CFR Part 63.648.

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

ii. [63.648(a)(2)]
Calculation of percentage leaking equipment components for Subpart VV of 40 CFR Part 60 may be done on a process unit basis or a source wide basis. Once the permittee has decided, all subsequent calculations shall be on the same basis unless a permit change is made.

2.d [63.640(p)] - Equipment Leaks
If there is an overlap of 40 CFR Part 63, Subpart CC with other regulations for equipment leaks, after the compliance dates, that are also subject to the provisions of 40 CFR Part 60 and 61, the permittee is required to comply only with the provisions specified in 40 CFR Part 63, Subpart CC.

2.e [63.640(q)] - Equipment Leaks
For overlap of 40 CFR Part 63, Subpart CC with local or State regulations, the permitting authority for the affected source may allow consolidation of the monitoring, record keeping, and reporting requirements under Subpart CC with the monitoring, record keeping, and reporting requirements under other applicable requirements in 40 CFR Part 60, 61, or 63, and in any 40 CFR 52 approved State implementation plan provided the implementation plan allows for approval of alternative monitoring, reporting, or record keeping requirements and provided that the permit contains an equivalent degree of compliance and control.

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

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

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

iii After the compliance dates specified in 40 CFR Part 63.640(h), a Group 2 storage vessel that is part of a new source and is subject to the control requirements in 60.112b of 40 CFR Part 60, Subpart Kb is required to comply only with 40 CFR Part 60, Subpart Kb except as provided in paragraph viii. of this section.

iv After the compliance dates specified in 40 CFR Part 63.640(h), a Group 2 storage vessel that is part of a new source and is subject to 40 CFR Part 60.110b, but is

not required to apply controls by 40 CFR Part 60.110b or 60.112b is required to comply only with this subpart.

v. After the compliance dates specified in 40 CFR Part 63.640(h), a Group 1 storage vessel that is also subject to the provisions of 40 CFR Part 60, Subparts K or Ka is required to only comply with the provisions of 40 CFR Part 63, Subpart CC.

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

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

viii. Storage vessels described by paragraphs i. through iii. of this section are to comply with 40 CFR Part 60, Subpart Kb except as provided for in paragraphs viii.(a) through viii.(f) of this section.

(a) Storage vessels that are to comply with 40 CFR Part 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.

(b) 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 Part 63.120(b)(7)(i) or 63.120(b)(7)(ii) of Subpart G.

(c) 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.

(d) If an extension is utilized in accordance with paragraph viii.(c) of this section, the permittee shall, in the next periodic report, identify the vessel, provide the information listed in §60.113b(a)(2) or §60.113b(b)(4)(iii), and describe the nature and date of the repair made or provide the date the storage vessel was emptied.

(e) 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.

(f) 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. The permittee shall comply with the storage vessel provisions as specified in Part II - Facility Terms and Conditions, section C and as referenced in the Specific Terms and Conditions - Part III for each emissions unit.

2.g If an additional petroleum refining process unit is added to a plant site or if a miscellaneous process vent, storage vessel, gasoline loading rack, or marine tank vessel loading operation that meets the criteria in 40 CFR Part 63.640(c)(1) through (c)(7) of Subpart CC is added to an existing petroleum refinery or if another deliberate operational process change creating an additional Group 1 emission point(s) (as defined in 63.641 of Subpart CC) is made to an existing petroleum refining process change creating an additional Group 1 emission point(s) (as defined in 63.641 of Subpart CC) is made to an existing petroleum refining process unit, and if the addition or process change is not subject to the new source requirements as determined according to 40 CFR Part 63.640(i) of (j) of Subpart CC, the requirements in paragraphs i. Through iii. Of this section shall apply. Examples of 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 Part 63.654(f).

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

ii. [63.640(1)(2)]
The added emission point(s) and any emission point(s) within the added or changed petroleum refining process unit shall be in compliance with 40 CFR Part 63, Subpart CC, by the dates specified in paragraphs ii.(a) or ii.(b) of this section, as applicable.

(a) 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.

(b) 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 Part 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 63.640(m)(1) through (m)(3) [see section A.I.1.] to establish a compliance date.

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

(a) the Notification of Compliance Status report as required by 40 CFR Part 63.654(f) for the emission points that were added or changed;

(b) Periodic Reports and other reports as required by 40 CFR Part 63.654(g) and (h);

(c) reports and notifications required by sections of Subpart A of 40 CFR Part 63 that are applicable to this subpart, as identified in table 6 of Subpart CC.

(d) reports and notifications required by 40 CFR Part 63.182 or 40 CFR Part 60.487. The requirements of Subpart H of this part are summarized in table 3 of Subpart CC;

(e) reports required by 40 CFR Part 61.357 of Subpart FF;

(f) reports and notifications required by 40 CFR Part 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

(g) [63.640(1)(4)]
If pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, or instrumentation systems are added to an existing source, they are subject to the equipment leak standards for existing sources in 40 CFR Part 63.648 [see section A.II]. A notification of compliance status report shall not be required for such added equipment.

2.h [63.640(m)]
If a change that does not meet the criteria in 40 CFR Part 63.640(a) 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 Part 63.641), the permittee shall comply with the requirements of Subpart CC for existing sources for the Group 1 emission point as expeditiously as practicable, but in no event later than 3 years after the emission point becomes Group 1.

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 effect 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.

2.i The permittee shall comply with the requirements of either sections A.I.2.k.i. or A.I.2.k.ii. for all Group 1 miscellaneous process vents at the facility by one of the following methods:

i. Reduce emissions of organic HAPs using a flare that meets the requirements of 40 CFR Part 63.11(b) of Subpart A of this part.

ii. Reduce emissions of organic HAPs, 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.

2.j If a boiler or process heater is used to comply with the percentage of reduction requirement or concentration limit specified in section A.I.2.k.ii. , then the vent stream shall be introduced into the flame zone of such a device, or in a location such that the required percent reduction or concentration is achieved.

2.k [OAC rule 3745-21-09(M)(3)(a)] PROCESS UNIT TURNAROUNDS
Each permittee of a petroleum refinery 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.

2.l All asbestos renovation and demolition activities conducted at this facility shall be performed in accordance with the applicable requirements specified in 40 CFR Part 61 and OAC Chapter 3745-20.

2.m In accordance with Ohio EPA Engineering Guide # 64 and OAC Chapter 3745-25, an emission control action plan, as specified in OAC rule 3745-25-03, shall be developed and submitted within 60 days after receiving notification from the Ohio EPA that such a plan is required.

2.n The permittee shall comply with all applicable provisions specified in 40 CFR Part 82, Subparts B and F as related to the operations at this facilty.

2.o This facility developed and registered a risk management plan pursuant to section 112(r) of the Act and is required to comply with the requirements of section 112(r) and the regulations adopted thereunder.

2.p The permittee shall comply will all applicable provisions specified in 40 CFR Part 63, Subpart GGGGG as related to any site remediation activities at this facility (see A.VI.20 through A.VI.81).

II. **Operational Restrictions** - 40 CFR Part 63, Subpart CC

[63.648] EQUIPMENT LEAK STANDARDS - 40 CFR Part 63, Subpart CC

1. [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 and 40 CFR Part 63.648(c) [see section A.II. in Part II] (i.e., quarterly or semiannually) is governed by the requirements of 40 CFR Part 63.648(b)(1) and (b)(2) [see section A.II. in Part II].

   a. [63.648(b)(1)]
   Monitoring data must meet the test methods and procedures specified in 40 CFR 60.485 except for minor departures.

   b. [63.648(b)(2)]
   Departures from the criteria specified in 40 CFR Part 60.485(b) or from the monitoring frequency specified in 40 CFR Part 60, Subpart VV or in 40 CFR Part 63.648(c) [see section A.II. in Part II] (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.

2. [63.648(c)]
In lieu of complying with the existing source provisions of 63.648(a) [see section A.I.2. in Part II], the permittee may elect to comply with the requirements of 40 CFR Part 63.161

through 63.169, 63.171, 63.172, 63.175, 63.176, 63.177, 63.179 and 63.180 of Subpart H except as provided in 40 CFR Part 63.648(c)(1) through (c)(10) and 40 CFR Part 63.648(e) through (i) of Subpart CC.

3. [63.648(f)]
Reciprocating pumps in light liquid service are exempt from 60.482 [see section A.II. in Part II] if recasting the distance piece or reciprocating pump replacement is required.

4. [63.648(g), (g)(1) and (g)(2)]
Compressors in hydrogen service are exempt from the requirements of 63.648(a) and (c) [see sections A.I.2. and A.II. in Part II] if a permittee demonstrates that a compressor is in hydrogen service.

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

   b. 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. To determine the percentage hydrogen content, refer to 40 CFR Part 63.648(g)(2)(i).

5. [63.648(i)]
Reciprocating compressors are exempt from seal requirements if recasting the distance piece or compressor replacement is required.

6. [60.482-1] STANDARDS: GENERAL - 40 CFR Part 60, Subpart VV

   a. [60.482-1(a)]
   Each permittee subject to the provisions of this subpart shall demonstrate compliance with the requirements of 60.482-1 to 60.482-10 [see section A.II. in Part II] for all equipment within 180 days of initial startup.

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

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

      ii. If the Administrator makes a determination that a means of emission limitation is at least equivalent to the requirements of 60.482-2, 60.482-3, 60.482-5, 60.482-6, 60.482-7, 60.482-8 and 60.482-10 [see section A.II. in

Part II], the permittee shall comply with the requirements of that determination.

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

7. [60.482-2] STANDARDS: PUMPS IN LIGHT LIQUID SERVICE - 40 CFR Part 60, Subpart VV

a. [60.482-2(a)]
Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in 60.485(b) [see section A.V. in Part II], except as provided in 60.482-1(c) [see section A.II. in Part II] and paragraphs d., e., and f. of this section. 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. [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. [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 60.482-9 [see section A.II. in Part II]. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

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

i. Each dual mechanical seal system is:

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

(b) equipped with a barrier fluid degassing reservoir that is connected by a closed vent system to a control device that complies with the requirements of 60.482-10 [see section A.II.in Part II]; or

(c) 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 paragraph d.iii. of this section 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 paragraph d.v. of this section, 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 [see section A.II. in Part II]. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

e. [60.282-2(e)]
Any pump that is designated, as described in 60.486(e)(1) and (2) [see section A.III. in Part II], for no detectable emission, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs a., c., and d. of this section 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 40.485(c) [see section A.V. in Part II]; and

iii. is tested for compliance with paragraph e.ii. of this section initially upon designation, annually, and at other times requested by the Administrator.

f. [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 60.482-10 [see section A.II. in Part II]], it is exempt from paragraphs a. through e. of this section.

8. [60.482-3] STANDARDS: COMPRESSORS - 40 CFR Part 60, Subpart VV

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

b. [60.482-3(b)(1)-(3)]
Each compressor seal system as required in paragraph a. of this section 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 60.482-10 [see section A.II. in Part II]]; or

iii. equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.

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

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

e. [60.482-3(e)]
Each sensor as required in paragraph d. of this section 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.

f. [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., a leak is detected.

g. [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 60.482-9 [see section A.II. in Part II]]. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

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

i. [60.482-3(i)]

Any compressor that is designated, as described in 60.486(e)(1) and (2) [see section A.III. in Part II], 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 this section 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 60.485(c) [see section A.V. in Part II]; and

ii. is tested for compliance with section A.II.9.i.i, initially upon designation, annually, and at other times requested by the Administrator.

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

1. 9. [60.482-4] STANDARDS: PRESSURE RELIEF DEVICES IN GAS/VAPOR SERVICE - 40 CFR Part 60, Subpart VV

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

b. [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 60.482-9 [see section A.II. in Part II]. No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in 60.485(c) [see section A.V. in Part II].

c. [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 60.482-10 [see section A.II.in Part II] is exempted from the requirements of paragraphs a. and b. of this section.

10. [60.482-5] STANDARDS: SAMPLING CONNECTION SYSTEMS - 40 CFR Part 60, Subpart VV

    a. [60.482-5(a)]
    Each sampling connection system shall be equipped with a closed-purged, closed-loop, or closed-vent system, except as provided in 60.482-1(c) [see section A.II. in Part II].

    b. [60.482-5(b)]
    Each closed-purge, closed-loop, or closed-vent system as required in paragraph a. of this section shall comply with the requirements specified in paragraphs b.i. through b.iii. of this section:

        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 60.482-10 [see section A.II. in Part II].

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

11. [60.482-6] STANDARDS: OPEN-ENDED VALVES OR LINES - 40 CFR Part 60, Subpart VV

    a. [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 60.482-1(c) [see section A.II in Part 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.

    b. [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.

    c. [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 this section at all other times.

12. [60.482-7] STANDARDS: VALVES IN GAS/VAPOR SERVICE AND IN LIGHT LIQUID SERVICE - 40 CFR Part 60, Subpart VV

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

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

c. [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.

d. [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 60.482-9 [see section A.II.]. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

e. [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.

f. [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 this section 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 60.485(c) [see section A.V. in Part II]; and

iii. is tested for compliance with paragraph f.ii. of this section initially upon designation, annually, and at other times requested by the Director and/or Administrator.

g. [60.482-7(g)(1)(2)]
Any valve that is designated, as described in 60.486(f)(1) [see section A.III. of Part II], as an unsafe-to-monitor valve is exempt from the requirements of paragraph a. of this section 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 this section; 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.

h. [60.482-7(h)(1)-(3)]
Any valve that is designated, as described in 60.486(f)(2) [see section A.III. of Part II], as a difficult-to-monitor valve is exempt from the requirements of paragraph a. of this section 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 Part 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.

13. [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 Part 60, Subpart VV

a. [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 60.485(b) [see section A.V. in Part II] if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method.

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

c. [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 60.482-9 [see

section A.II. of Part II]. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

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

14. [60.482-9] STANDARDS: DELAY OF REPAIR - 40 CFR Part 60, Subpart VV

a. [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.

b. [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.

c. [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 60.482-10 [see section A.II. of Part II].

d. [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.

e. [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.

15. [60.482-10] STANDARDS: CLOSED VENT SYSTEMS AND CONTROL DEVICES - 40 CFR Part 60, Subpart VV

a. [60.482-10(a)]
Permittees of closed vent systems and control devices used to comply with provisions of 40 CFR Part 60, Subpart VV shall comply with the provisions of this paragraph and the record keeping for closed vent systems found in Part III.

b. [60.482-10(b)]
Vapor recovery systems (for example, condensers and adsorbers) shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater.

c. [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 provide a minimum residence time of 0.75 seconds at a minimum temperature of 816°C.

d. [60.482-10(d)]
Flares used to comply with this subpart shall comply with the requirements of 40 CFR Part 60.18.

e. [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.

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

i. [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 60.485(b) [see section A.V. in Part II]; and conduct annual visual inspections for visible, audible, or olfactory indications of leaks.

ii. [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 60.485(b) [see section A.V. in Part II] and conduct annual inspections according to the procedures in 60.485(b) [see section A.V. in Part II].

g. [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 paragraph h. of this section. 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.

h. [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.

i. [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.i. and f.ii. of this section.

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

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.i. or f.ii. of this section; and

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

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

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 Part 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.

l. [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.

16. [60.483-1] ALTERNATIVE STANDARDS FOR VALVES - ALLOWABLE PERCENTAGE OF VALVES LEAKING - 40 CFR Part 60, Subpart VV

a. [40.483-1(a)]
The permittee may elect to comply with an allowable percentage of valves leaking of equal to or less than 2.0 percent.

b. [40.483-1(b)]
The following requirements shall be met if the permittee wishes to comply with an allowable percentage of valves leaking:

c. 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 60.487(b) [see section A.II. in Part II].

i. A performance test as specified in paragraph c. of this section shall be conducted initially upon designation, annually, and at other times requested by the Director and Administrator.

ii. If a valve leak is detected, it shall be repaired in accordance with 60.482-7(d) and (e) [see section A.II. in Part II].

d. [40.483-1(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 60.485(b) [see section A.V. in Part II].

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.

e. [40.483-1(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.

17. [60.483-2] ALTERNATIVE STANDARDS FOR VALVES - SKIP PERIOD LEAK DETECTION AND REPAIR - 40 CFR Part 60, Subpart VV

    a. [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 this section. The permittee must notify the Director and Administrator before implementing one of the alternative work practices, as specified in 40 CFR Part 60.487(b).

    b. [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 60.482-7 [see section A.II. in Part II].

        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 60.482-7 [see section A.II. in Part II], 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.

18. [60.484] EQUIVALENCE OF MEANS OF EMISSION LIMITATION - 40 CFR Part 60, Subpart VV

    a. [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.

b. [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.

c. [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.

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

e. [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.

f. [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 this section.

III Monitoring and/or Record Keeping Requirements

1. [60.482-10(l)] STANDARDS: CLOSED VENT SYSTEMS AND CONTROL DEVICES - 40 CFR Part 60, Subpart VV
The permittee shall record the information specified in paragraphs 1.a. through 1.e. of this section.

a. [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.

b. [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.

c. [60.482-10(l)(3)]
For each inspection during which a leak is detected, a record of the information specified in 60.486(c) [see section A.III. of Part II].

d. [60.482-10(l)(4)]
For each inspection conducted in accordance with 60.485(b) [see section A.V. of Part II] during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

e. [60.482-10(l)(5)]
For each visual inspection conducted in accordance with section 60.482-10(f)(i) [see section A.II. of Part II] during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

2. [60.486] RECORD KEEPING REQUIREMENTS, EQUIPMENT LEAKS - 40 CFR Part 60, Subpart VV

a. [60.486(a)]
Each permittee subject to the provisions of 40 CFR Part 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.

b. [60.486(b)]
When each leak is detected as specified in 60.482-2, 60.482-3, 60.482-7, 60.482-8 and 40 CFR Part 60.483-2 [see section A.II of Part II], the following requirements apply:

i. [60.486(b)(1)]
A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

ii. [60.486(b)(2)]
The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 60.482-7(c) [see section A.II. of Part II] and no leak has been detected during those 2 months.

iii. [60.486(b)(3)]
The identification on equipment except on a valve, may be removed after it has been repaired.

c. [60.486(c)]
When each leak is detected as specified in 60.482-2, 60.482-3, 60.482-7, 60.482-8 and 40 CFR Part 60.483-2 [see section A.II of Part II], the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:

i. [60.486(c)(1)]
The instrument and operator identification numbers and the equipment identification number.

ii. [60.486(c)(2)]
The date the leak was detected and the dates of each attempt to repair the leak.

iii. [60.486(c)(3)]
Repair methods applied in each attempt to repair the leak.

iv. [60.486(c)(4)]
"Above 10,000" if the maximum instrument reading measured by the methods specified in 60.485(a) [see section A.V. of Part II] after each repair attempt is equal to or greater than 10,000 ppm.

v. [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. [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. [60.486(c)(7)]
The expected date of successful repair of the leak if a leak is not repaired within 15 days.

viii. [60.486(c)(8)]
Dates of process unit shutdown that occur while the equipment is unrepaired.

ix. [60.486(c)(9)]
The date of successful repair of the leak.

d. [60.486(d)]
The following information pertaining to the design requirements for closed vent systems and control devices described in 60.482-10 [see section A.II. of Part II] shall be recorded and kept in a readily accessible location:

i. [60.486(d)(1)]
Detailed schematics, design specifications, and piping and instrumentation diagrams.

ii. [60.486(d)(2)]
The dates and descriptions of any changes in the design specifications.

iii. [60.486(d)(3)]
A description of the parameter or parameters monitored, as required in 60.482-10(e) [see section A.II. of Part II], to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.

iv. [60.486(d)(4)]

Periods when the closed vent systems and control devices required in 60.482-2, 60.482-3, 60.482-4, and 60.482-5 [see section A.II. of Part II] are not operated as designed, including periods when a flare pilot light does not have a flame.

v. [60.486(d)(5)]
Dates of startups and shutdowns of the closed vent systems and control devices required in 60.482-2, 60.482-3, 60.482-4, and 60.482-5 [see section A.II. of Part II].

e. [60.486(e)]
The following information pertaining to all equipment subject to the requirements in 60.482-1 to 60.482-10 [see section A.II. of Part II] shall be recorded in a log that is kept in a readily accessible location:

i. [60.486(e)(1)]
A list of identification numbers for equipment subject to the requirements of 40 CFR Part 60, Subpart VV.

ii. [60.486(e)(2)]
A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 60.482-2(e), 60.482-3(i) and 60.482-7(f) [see section A.II. of Part II]. The designation of equipment subject to the requirements of 60.482-2(e), 60.482-3(i), or 60.482-7(f) [see section A.II. of Part II] shall be signed by the permittee.

iii. [60.486(e)(3)]
A list of equipment identification numbers for pressure relief devices required to comply with 60.482-4 [see section A.II. of Part II].

iv. [60.486(e)(4)]

(a) The dates of each compliance test as required in 60.482-2(e), 60.482-3(i), 60.482-4, and 60.482-7(f) [see section A.II. of Part II].

(b) The background level measured during each compliance test.

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

v. [60.486(e)(5)]
A list of identification numbers for equipment in vacuum service.

f. [60.486(f)]
The following information pertaining to all valves subject to the requirements of 60.482-7(g) and (h) [see section A.II. in Part II] shall be recorded in a log that is kept in a readily accessible location:

i. [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. [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.

g. [60.486(g)]
The following information shall be recorded for valves complying with 40 CFR Part 60.483-2:

i. A schedule of monitoring.

ii. The percent of valves found leaking during each monitoring period.

h. [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 60.482-2(d)(5) and 60.482-3(e)(2) [see section A.II. in Part II], and an explanation of the design criterion; along with any changes to this criterion and the reasons for the changes.

i. [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 Part 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.

j. [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.

k. [60.486(k)]
The provisions of 40 CFR Part 60.7(b) and (d) do not apply to affected facilities subject to 40 CFR Part 60, Subpart VV.

3. MONITORING REQUIREMENTS FOR MISCELLANEOUS PROCESS VENTS - 40 CFR Part 63, Subpart CC [63.644]

a. Except as provided in section A.III.6.b., when the permittee utilizes a combustion device to comply with the requirements in III.a, the permittee shall install the monitoring equipment specified in sections A.III.6.a. (i.-iv.), 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. The temperature monitoring device shall be installed in the firebox or in the ductwork immediately downstream of the firebox in a position before any substantial heat exchange occurs.

   ii. 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 megawatt 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.

b. The permittee may request approval to monitor parameters other than those listed above. The request shall be submitted according to the procedures specified in section A.III.6.a. 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 paragraph (a) above, but seeks to monitor a parameter other than those specified in section A.III.6.a.

c. If the permittee uses a vent system that contains bypass lines that could divert a vent stream away from the control device used to comply with section A.III.6.a., the permittee shall comply with either section A.III.6.c (i. or ii.). 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 the equipment leak provisions of these terms and conditions are not subject to this paragraph.

i. Install, calibrate, maintain, and operate a flow indicator that determines whether a vent stream flow is present at least once every hour. The flow indicator shall be installed at the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere; or

ii. 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.

d. The permittee shall establish a range that ensures compliance with the emissions standard for each parameter monitored under sections A.III.6.a. and A.III.6.b.

e. The permittee 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 sections A.III.6.a. and A.III.6.b. Operation of the control device in a manner that constitutes a period of excess emissions, as defined below, or failure to perform procedures required by this section shall constitute a violation of the applicable emission standard of this subpart.

i. Period of excess emissions 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 sections A.III.6.e.i.(a) and A.III.6.e.i.(b) are available for less than 75 percent of the operating hours.

(d) For data compression systems approved under this section an operating time period when the monitor operated for less than 75 percent of the operating period, or a day when less than 18 monitoring values were recorded.

ii. Periods of startup and shutdown and malfunction 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 malfunction.

4. In accordance with OAC rule 3745-21-09(T), the permittee shall comply with the following monitoring and record keeping requirements, at a minimum:

   a. For all emissions units which are subject to VOC leaks:

      i. Annual monitoring of all pump seals and process drains in accordance with section A.V;

      ii. Quarterly monitoring of all compressor seals and pressure relief valves in gas service in accordance with the methods and procedures in section A.V;

      iii. Visual monitoring of all pump seals each month;

      iv. Monitoring of any pump seal in accordance with the methods and procedures in section A.V within five working days after the seal has vented to the atmosphere;

      v. Monitoring of any relief valve in accordance with the methods and procedures in section A.V within five working days after the valve has vented to the atmosphere; and

      vi. Monitoring of any component in accordance with the methods and procedures in section A.V within five working days after the repair of a leak.

   b. Pressure relief devices which are connected to an operating flare header, vapor recovery devices, storage tank valves and valves which are not externally regulated are exempt from the monitoring requirements in sections A.III.7.a through A.III.7.f.

   c. All pressure relief valves in gas service shall be clearly marked and identified in such a manner that they will be obvious to both refinery personnel performing monitoring.

   d. For any pressure relief valves in gas or liquid service, the permittee may employ an alternative monitoring schedule as outlined below:

      i. The valve is designated as difficult to monitor and is monitored each calendar year, provided;

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

(b) The permittee demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than six feet above a support surface; and

(c) The permittee 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 is monitored as frequently as practical during safe to monitor times, provided the following conditions are met:

(a) the permittee 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 section A.III.7.a.; and

(b) the permittee 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.

e. If a leak is identified as the result of the monitoring program and the concentration of VOC exceeds 10,000 ppmv, a tag shall immediately be placed on the leaking component. The tag shall be readily visible and weatherproof; it shall bear an ID number, and it shall clearly indicate the date the leak was detected. The tag shall remain in place until the leaking component is repaired.

f. A monitoring log shall be maintained for all leaking components which are tagged. The 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;

iii. the tag number of the leaking component;

iv. the date on which each leak was detected and repaired;

v. the date and results of the monitoring performed within 5 working days after the leaking component was repaired;

vi. a record of the calibration of the monitoring instrument;

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

viii. the total number of components monitored and the total number of components found leaking during the calendar year.

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.

h. A copy of any monitoring log shall immediately be made available to the director or an authorized representative upon verbal or written request, at any reasonable time.

5. The permittee shall maintain three (3) lists of emissions units with equipment that is subject to 40 CFR Part 60 (Subpart VV), in HAP service, and/or subject to OAC rule 3745-21-09(T), respectively. The permittee shall update these lists as affected emissions units are discovered. The permittee shall notify the Canton City Health Department, Division of Air Pollution Control of any additions or deletions of emissions units from the list by the end of the calendar quarter during which the discovery was made with an explanation for the addition or deletion. The permittee shall comply with the applicable terms and conditions as specified in the Part II - Facility Specific Terms and Conditions, section A, of this permit for emissions units as listed.

IV. Reporting Requirements

1. [60.487] REPORTING REQUIREMENTS, EQUIPMENT LEAKS - 40 CFR Part 60, Subpart VV

a. [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.

b. [60.487(c)(1) - (4)]
All semiannual reports to the Director and Administrator shall include the following information, summarized from the information in 60.486 [see section A.III. of Part II]:

i. [60.487(c)(1)]
Process unit identification.

ii. [60.487(c)(2)]
For each month during the semiannual reporting period:

(a) number of valves for which leaks were detected as described in 60.482(7)(b) [see section A.II. in Part II];

(b) number of valves for which leaks were not repaired as required in paragraph 60.482-7(d)(1) [see section A.II. in Part II];

(c) number of pumps for which leaks were detected as described in 60.482-2(b) and (d)(6)(i) [see section A.II. in Part II];

(d) number of pumps for which leaks were not repaired as required in 60.482-2(c)(1) and (d)(6)(ii) [see section A.II. in Part II];

(e) number of compressors for which leaks were detected as described in 60.482-3(f) [see section A.II. in Part II];

(f) number of compressors for which leaks were not repaired as required in 60.482-3(g)(1) [see section A.II. in Part II]; and

(g) the facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible.

iii. [60.487(c)(3)]
Dates of process unit shutdowns which occurred within the semiannual reporting period.

iv. [60.487(c)(4)]
Revisions to items reported according to 40 CFR Part 60.487(b) if changes have occurred since the initial report or subsequent revisions to the initial report.

c. [60.487(d)]
The permittee electing to comply with the provisions of 40 CFR Part 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.

d. [60.487(e)]
The permittee shall report the results of all performance tests in accordance with 40 CFR Part 60.8 of the General Provisions. The provisions of 40 CFR Part 60.8(d) do not apply to affected facilities subject to the provisions of 40 CFR Part 60, Subpart VV except that the permittee must notify the Director and Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests.

2. REPORTING REQUIREMENTS FOR MISCELLANEOUS PROCESS VENTS - 40 CFR Part 63, Subpart CC [63.644 and 63.645]

a. The permittee shall report startup, shutdown and malfunctions required by 40 CFR Part 63.10(d)(5). Records and reports of startup, shutdown and malfunctions are not required if they pertain solely to Group 2 emission points.

b. The permittee shall submit Periodic Reports indicating any compliance exceptions no later than 60 days after the end of each 6-month period when the compliance exceptions occur. For miscellaneous process vents for which continuous parameter monitors are required, periods of excess emissions shall be identified in the Periodic Reports and shall be used to determine compliance with the emission standards. Excess emissions shall be reported for the operating parameters

specified in 40 CFR Part 63 (Appendix Table 10). Periods of startup and shutdown that meet the definition of 40 CFR Part 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.

c. The permittee shall submit the results of any performance test conducted during the period covered by the Periodic report used to demonstrate compliance for any MPV that have been changed from a Group 2 to a Group 1 MPV. The results are to be included in the periodic report and 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. The complete test report shall remain onsite.

3. In accordance with OAC rule 3745-21-09(T), for all emissions units which are subject to VOC leaks, the permittee shall submit to the director by the 15th day of January, April, July, and October that gives the total number of components monitored during the previous three calendar months, gives the total number of components found leaking during the previous three calendar months, identifies all components which were found leaking during the previous three calendar months but which were not repaired within 15 days, and identifies all leaking components which cannot be repaired until the next process unit turnaround.

4. The permittee may be subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers, 40 CFR Part 63, Subpart DDDDD, Reciprocating Internal Combustion Engines (RICE), 40 CFR Part 63, Subpart ZZZZ, and Organic Liquids Distribution, 40 CFR Part 63, Subpart EEEE. U.S. EPA failed to promulgate this standard by May 15, 2002, the Maximum Achievable Control Technology (MACT) hammer date. In accordance with 40 CFR Part 63, Subpart B (40 CFR Parts 63.50 through 63.56), the permittee shall submit an application to revise the permit to include equivalent emission limitations as a result of a case-by-case MACT determination. The application shall be submitted in two parts. The deadline to submit the Part I application, as specified in 40 CFR Part 63.53, was May 15, 2002.

5. 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.

6. 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.

V. Testing Requirements

1. [60.485] TEST METHODS AND PROCEDURES, LEAK DETECTION - 40 CFR Part 60, Subpart VV

a. [60.485(a)]
In conducting the performance tests required in 40 CFR Part 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 Part 60.8(b).

b. [60.485(b)]
The permittee shall determine compliance with the standards in 60.482, 60.483, and 60.484 [see section A.II. in Part II] as follows. Method 21 shall be used to

determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used:

i. [60.485(b)(1)(i)]
zero air (less than 10 ppm of hydrocarbon in air); and

ii. [60.485(b)(1)(ii)]
a mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane.

c. [60.485(c)]
The permittee shall determine compliance with the no detectable emission standards in 60.482-2(e), 60.482-3(i), 60.482-4, 60.482-7(f) and 60.482-10(e) [see section A.II. in Part II] as follows:

i. The requirements of paragraph (b) 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.

d. [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. [60.485(d)(1)]
Procedures that conform to the general methods in ASTM E-260, E-168, E-169 (incorporated by reference-see 40 CFR Part 60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment.

ii. [60.485(d)(2)]
Organic compounds that are considered by the 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. [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, paragraphs d.i. and d.ii. of this section shall be used to resolve the disagreement.

e. [60.485(e)]
The permittee shall demonstrate that an equipment is in light liquid service by showing that all the following conditions apply:

i. [60.485(e)(1)]
The vapor pressure of one or more of the components is greater than 0.3 kPa at 20°C. Standard reference texts or ASTM D-2879 (incorporated by reference-see 40 CFR Part 60.17) shall be used to determine the vapor pressures.

ii. [60.485(e)(2)]
The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20°C is equal to or greater than 20 percent by weight.

iii. [60.485(e)(3)]
The fluid is a liquid at operating conditions.

f. [60.485(f)]
Samples used in conjunction with paragraphs d., e., and g. of this section shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare.

g. [60.485(g)]
The permittee shall determine compliance with the standards of flares as follows:

i. [60.685(g)(1)]
Method 22 shall be used to determine visible emissions.

ii. [60.685(g)(2)]
A thermocouple or any other equivalent device shall be used to monitor the presence of a pilot flame in the flare.

iii. [60.685(g)(3)]
The maximum permitted velocity (V_{max}) for air-assisted flares shall be computed using the following equation:

$$V_{max} = 8.706+0.7084\ H_T$$

where:
V_{max} = maximum permitted velocity, m/sec.
H_T = net heating value of the gas being combusted, MJ/scm.

iv. [60.685(g)(4)]
The net heating value (H_T) of the gas being combusted in a flare shall be computed using the equation found in 40 CFR Part 60.685(g)(4).

v. [60.685(g)(5)]

Method 18 and ASTM D 2504-67 (incorporated by reference-see 40 CFR Part 60.17) shall be used to determine the concentration of sample component "i."

vi. [60.685(g)(6)]
ASTM D 2382-76 (incorporated by reference-see 40 CFR Part 60.17) shall be used to determine the net heat of combustion of component "i" if published values are not available or cannot be calculated.

vii. [60.685(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.

2. TESTING AND COMPLIANCE METHODS AND PROCEDURES FOR MISCELLANEOUS PROCESS VENTS - 40 CFR Part 63, Subpart CC [63.645]

a. The permittee shall comply with the flare provisions in 40 CFR Part 63.11(b) when a flare is used to comply with the terms and conditions in this permit. The permittee is not required to conduct a performance test to determine percent emission reduction or outlet organic HAP or TOC concentration when a flare is used.

b. The permittee is not required to conduct a performance test when any of the following control devices are used:

i. Any boiler or process heater with a design heat input capacity of 44 megawatts or greater.

ii. Any boiler or process heater in which all vent streams are introduced into the flame zone.

iii. A control device for which a performance test was conducted for determining compliance with a regulation promulgated by the EPA and the test was conducted using the same methods specified in this section and either no process changes have been made since the test, or the permittee can demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process changes.

c. Except as provided in sections A.V.2.a and A.V.2.b, the permittee shall use a control device to comply with the organic HAP concentration limit or percent reduction efficiency requirements of this permit and shall conduct a performance test using the procedures in sections A.V.2.c.i through A.V.2.c.iv. 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 below.

i. Method 1 or 1A of 40 CFR Part 60, Appendix A, as appropriate, shall be used for selection of the sampling sites.

(a) For determination of compliance with the 98 percent reduction of total organic HAP requirement sampling sites shall be located at the inlet of the control device and at the outlet of the control device as specified below:

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

(ii) If a process vent stream is introduced with the combustion air or as a secondary fuel into a boiler or process heater with a design capacity less than 44 megawatts, selection of the location of the inlet sampling sites shall ensure the measurement of total organic HAP of TOC (minus methane and ethane) concentrations in all process vent streams and primary and secondary fuels introduced into the boiler or process heater with a design capacity less than 44 megawatts, selection of the location of the inlet sampling sites shall ensure the measurement of total organic HAP or TOC (minus methane and ethane) concentrations in all process vent streams and primary and secondary fuels introduced into the boiler or process heater.

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

ii. The gas volumetric flow rate shall be determined using Method 2, 2A, 2C, or 2D of 40 CFR Part 60, Appendix A, as appropriate.

iii. To determine compliance with the 20 parts per million by volume total organic HAP limit of the subpart, the permittee shall use Method 18 of 40 CFR Part 60, Appendix A to measure either TOC minus methane and ethane or total organic HAP. Alternatively, any other method or data that has been validated according to the applicable procedures in Method 301 of Appendix A of this part may be used. The following procedures shall be used to calculate parts per million by volume concentration, corrected to 3 percent oxygen:

(a) The minimum sampling time for each run shall be 1 hour in which either an integrated sample or a minimum of four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at approximately equal intervals in time, such as 15-minute intervals during the run.

(b) The concentration of either TOC (minus methane or ethane) or total organic HAP shall be calculated according to section A.V.2.c.iii.(b)(i) or A.V.2.c.iii.(b)(ii).

(i) 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:

C(TOC) = [Sum from I = 1 to x of {Sum from j = 1 to n of Cji}] / x

where:

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

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

n = Number of components in the sample.

x = Number of samples in the sample run.

(ii) The total organic HAP concentration (CHAP) shall be computed according to the equation in paragraph A.V.2.c.iii.(b)(i) of this section except that only the organic HAP species shall be summed. The list of organic HAPs is provided in Table 1 of 40 CFR Part 63 (Appendix A).

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

(i) The emission rate correction factor or excess air, integrated sampling and analysis procedures of Method 3B of 40 CFR Part 60, Appendix A shall be used to determine the oxygen concentration (%O2). The samples shall be taken during the same time that the TOC (minus methane or ethane) or total organic HAP samples are taken.

(ii) The concentration corrected to 3 percent oxygen (Cc) shall be computed using either of the following equations:

Cc = Cm {17.9 / 20.9 -%O2}

where:

Cc = Concentration of TOC or organic HAP corrected to 3 percent oxygen, dry basis, parts per million by volume.

Cm = Concentration of TOC (minus methane and ethane) or organic HAP, dry basis, parts per million by volume.

%O2 = Concentration of oxygen, dry basis, percent by volume.

iv. To determine compliance with the 98 percent reduction requirement, the permittee shall use Method 18 of 40 CFR Part 60, Appendix A; alternatively, any other method or data that has been validated according to the applicable procedures in Method 301 of Appendix A of this part may be used. The following procedures shall be used to calculate percent reduction efficiency:

(a) The minimum sampling time for each run shall be 1 hour in which either an integrated sample or a minimum of four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at approximately equal intervals in time such as 15-minute intervals during the run.

(b) The mass rate of either TOC (minus methane and ethane) or total organic HAP (Ei, Eo) shall be computed.

(i) The following equations shall be used:
Ei = K2 {Sum from j = 1 to n of Cij(Mij)} Qi

Eo = K2 {Sum from j = 1 to n of Coj(Mo)} Qo

where:

Cij, Coj = Concentration of sample component j of the gas stream at the inlet and outlet of the control device, respectively, dry basis, parts per million by volume.

Ei, Eo = Mass rate of TOC (minus methane and ethane) or total organic HAP at the inlet and outlet of the control device, respectively, dry basis, kilogram per hour.

Mij, Moj = Molecular weight of sample component j of the gas stream at the inlet and outlet of the control device, respectively, gram/gram-mole.

Qi, Qo = Flow rate of gas stream at the inlet and outlet of the control device, respectively, dry standard cubic meter per minute.

K2 = Constant, 2.494 x 10^(-6) (parts per million) ^ (-1) (gram-mole per standard cubic meter) (kilo-ram/gram) (minute/hour), where standard temperature (gram-mole per standard cubic meter) is 20º C.

(ii) Where the mass rate of TOC is being calculated, all organic compounds (minus methane and ethane) measured by Method 18 of 40 CFR Part 60, Appendix A are summed using the equation in section A.V.2.c.iv.(b)(i).

(iii) Where the mass rate of total organic HAP is being calculated, only the organic HAP species shall be summed using the equation in section A.V.2.c.iv.(b)(i). The list of organic HAPs is provided in Table 1 of 40 CFR Part 63, Appendix A.

(c) The percent reduction in TOC (minus methane and ethane) or total organic HAP shall be calculated as follows:

R = {(Ei - Eo) / Ei} x 100

where:

R = Control Efficiency of control device, percent

Ei = Mass rate of TOC (minus methane and ethane) or total organic HAP at the inlet to the control device as calculated under section A.V.iv.(b), kilograms TOC per hour or kilograms organic HAP per hour.

(d) If the process vent stream entering a boiler or process heater with a design capacity less than 44 megawatts is introduced with the combustion air or as a secondary fuel, the weight-percent reduction of total organic HAP or TOC (minus methane and ethane) across the device shall be determined by comparing the TOC (minus methane and ethane) or total organic HAP in all combusted vent streams

and primary and secondary fuels with the TOC (minus methane and ethane) or total organic HAP exiting the combustion device, respectively.

d. For purposes of determining the TOC emission rate, the sampling site shall be after the last product recovery device (as defined in § 63.641 of this subpart) (if any recovery devices are present), but prior to the inlet of any control device (as defined in § 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.

e. Except as provided in section A.V.2.f, the permittee may 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 section A.V.2.d.

ii. The gas volumetric flow rate shall be determined using Methods 2, 2A, 2 C 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 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:

(a) 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.

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

CTOC = {Sum over i = 1 to x of [Sum over j = 1 to n of 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:

E = K2 [Sum over j = 1 to n of CjMj] Qs

where:

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

K2 = Constant, 2.494 x 10 ^ 6 (parts per million) ^ 1 (gram-mole per standard cubic meter) (kilogram per gram) (minutes per hour), where the standard temperature (standard cubic meter) is at 20° C.

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.

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

f. Engineering assessment may be used to determine the TOC emission rate for the representative operating condition expected to yield the highest daily emission rate.

i. Engineering assessment includes, but is not limited to, the following:

(a) Previous test results provided the tests are representative of current operating practices at the process unit.

(b) Bench-scale or pilot-scale test data representative of the process under representative operating conditions.

(c) TOC emission rate specified or implied within a permit limit applicable to the process vent.

(d) 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:

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

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

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

(e) All data, assumptions, and procedures used in the engineering assessment shall be documented.

g. The owner or operator 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 section A.V.2.e and A.V.2.f, as applicable, or on best engineering assessment of the effects of the change. Engineering assessments shall meet the specifications in section A.V.g.

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 owner or operator shall submit a report as specified in § 63.654 (f), (g), or (h) and shall comply with the appropriate provisions in § 63.643 by the dates specified in § 63.640.

VI. Miscellaneous Requirements

MACT Group 1 Storage Vessel Requirements

1. 40 CFR Part 63.646 Storage vessel provisions

(a) Each owner or operator of a Group 1 storage vessel subject to this subpart shall comply with the requirements of §§ 63.119 through 63.121 of subpart G of this part except as provided in paragraphs (b) through (m) of this section.

(b) As used in this section, all terms not defined in § 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 § 63.641 shall apply in lieu of the Group 1 storage vessel definitions presented in tables 5 and 6 of § 63.119 of subpart G of this part.

(1) An owner or operator 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.

(2) When an owner or operator and the Administrator do not agree on whether the weight percent organic HAP in the stored liquid is above or below 4 percent for existing sources and 2 percent for new sources, Method 18 of 40 CFR part 60, Appendix A shall be used.

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

(d) References shall be replaced as specified in paragraphs (d)(1) through (d)(9) of this section.

(1) All references to § 63.100(k) of subpart F of this part (or the schedule provisions and the compliance date) shall be replaced with § 63.640(h),

(2) All references to April 22, 1994 shall be replaced with August 18, 1995.

(3) All references to December 31, 1992 shall be replaced with July 15, 1994.

(4) All references to the compliance dates specified in § 63.100 of subpart F shall be replaced with § 63.640 (h) through (m).

(5) All references to § 63.150 in § 63.119 of subpart G of this part shall be replaced with § 63.652.

(6) All references to § 63.113(a)(2) of subpart G shall be replaced with § 63.643(a)(2) of this subpart.

(7) All references to § 63.126(b)(1) of subpart G shall be replaced with § 63.422(b) of subpart R of this part.

(8) All references to § 63.128(a) of subpart G shall be replaced with § 63.425, paragraphs (a) through (c) and (e) through (h) of subpart R of this part.

(9) All references to § 63.139(d)(1) in § 63.120(d)(1)(iii) of subpart G shall be replaced with § 61.355 of subpart FF of part 61.

(e) When complying with the inspection requirements of § 63.120 of subpart G of this part, owners and operators 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.

(f) The following paragraphs (f)(1), (f)(2), and (f)(3) of this section apply to Group 1 storage vessels at existing sources:

(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.

(g) Failure to perform inspections and monitoring required by this section shall constitute a violation of the applicable standard of this subpart.

(h) References in §§ 63.119 through 63.121 to § 63.122(g)(1), § 63.151, and references to initial notification requirements do not apply.

(i) References to the Implementation Plan in § 63.120, paragraphs (d)(2) and (d)(3)(i) shall be replaced with the Notification of Compliance Status report.

(j) References to the Notification of Compliance Status report in § 63.152(b) shall be replaced with § 63.654(f).

(k) References to the Periodic Reports in § 63.152(c) shall be replaced with § 63.654(g).

(l) The State or local permitting authority can waive the notification requirements of §§ 63.120(a)(5), 63.120(a)(6), 63.120(b)(10)(ii), and 63.120(b)(10)(iii) for all or some storage vessels at petroleum refineries subject to this subpart. The State or local permitting authority may also grant permission to refill storage vessels sooner than 30 days after submitting the notifications in §§ 63.120(a)(6) or 63.120(b)(10)(iii) for all storage vessels at a refinery or for individual storage vessels on a case-by-case basis.

2. 40 CFR Part 63.119 Storage vessel provisions -- reference control technology.

(a) For each storage vessel to which this subpart applies, the owner or operator shall comply with the requirements of paragraphs (a)(1), (a)(2), (a)(3), and (a)(4) of this section according to the schedule provisions of §§ 63.100 of subpart F of this part.

(1) For each Group 1 storage vessel (as defined in table 5 of this subpart for existing sources and table 6 for new sources) storing a liquid for which the maximum true vapor pressure of the total organic hazardous air pollutants in the liquid is less than 76.6 kilopascals, the owner or operator 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 paragraph (b), (c), (d), (e), or (f) of this section, or equivalent as provided in §§ 63.121 of this subpart.

(2) For each Group 1 storage vessel (as defined in table 5 of this subpart for existing sources and table 6 of this subpart for new sources) storing a liquid for which the maximum true vapor pressure of the total organic hazardous air pollutants in the liquid is greater than or equal to 76.6 kilopascals, the owner or operator shall operate and maintain a closed vent system and control device meeting the requirements specified in paragraph (e) of this section, or route the emissions to a process or a fuel gas system as specified in paragraph (f) of this section, or equivalent as provided in §§ 63.121 of this subpart.

(3) For each Group 2 storage vessel that is not part of an emissions average as described in §§ 63.150 of this subpart, the owner or operator shall comply with the record keeping requirement in §§ 63.123(a) of this subpart and is not required to comply with any other provisions in §§§§ 63.119 through 63.123 of this subpart.

(4) For each Group 2 storage vessel that is part of an emissions average, the owner or operator shall comply with the emissions averaging provisions in §§ 63.150 of this subpart.

(b) The owner or operator who elects to use a fixed roof and an internal floating roof, as defined in §§ 63.111 of this subpart, to comply with the requirements of paragraph (a)(1) of this section shall comply with the requirements specified in paragraphs (b)(1) through (b)(6) of this section.

Note: The intent of paragraphs (b)(1) and (b)(2) of this section is to avoid having a vapor space between the floating roof and the stored liquid for extended periods. Storage vessels may be emptied for purposes such as routine storage vessel maintenance, inspections, petroleum liquid deliveries, or transfer operations. Storage vessels where liquid is left on walls, as bottom clingage, or in pools due to floor irregularity are considered completely empty.

(1) The internal floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified in paragraphs (b)(1)(i) through (b)(1)(iii) of this section.

(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) When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

(3) Each internal floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. Except as provided in paragraph (b)(3)(iv) of this section, the closure device shall consist of one of the devices listed in paragraph (b)(3)(i), (b)(3)(ii), or (b)(3)(iii) of this section.

(i) A liquid-mounted seal as defined in §§ 63.111 of this subpart.

(ii) A metallic shoe seal as defined in §§ 63.111 of this subpart.

(iii) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor- mounted, but both must be continuous seals.

(iv) If the internal floating roof is equipped with a vapor-mounted seal as of December 31, 1992, the requirement for one of the seal

options specified in paragraphs (b)(3)(i), (b)(3)(ii), and (b)(3)(iii) of this section does not apply until the earlier of the dates specified in paragraphs (b)(3)(iv)(A) and (b)(3)(iv)(B) of this section.

(A) The next time the storage vessel is emptied and degassed.

(B) No later than 10 years after April 22, 1994.

(4) 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.

(5) Except as provided in paragraph (b)(5)(viii) of this section, each internal floating roof shall meet the specifications listed in paragraphs (b)(5)(i) through (b)(5)(vii) of this section.

(i) Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and rim space vents is to provide a projection below the liquid surface.

(ii) 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 shall be equipped with a cover or lid. The cover or lid shall be equipped with a gasket.

(iii) 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.

(iv) Each automatic bleeder vent shall be gasketed.

(v) Each rim space vent shall be gasketed.

(vi) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

(vii) 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.

(viii) If the internal floating roof does not meet any one of the specifications listed in paragraphs (b)(5)(i) through (b)(5)(vii) of this section as of December 31, 1992, the requirement for meeting those specifications does not apply until the earlier of the dates specified in paragraphs (b)(5)(viii)(A) and (b)(5)(viii)(B) of this section.

(A) The next time the storage vessel is emptied and degassed.

(B) No later than 10 years after April 22, 1994.

(6) Each cover or lid on any opening in the internal floating roof shall be closed (i.e., no visible gaps), except when the cover or lid must be open for access. Covers on each access hatch and each gauge float well shall be bolted or fastened so as to be air-tight when they are closed. Rim space vents are to be set to open only when the internal floating roof is not floating or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

(c) The owner or operator who elects to use an external floating roof, as defined in §§ 63.111 of this subpart, to comply with the requirements of paragraph (a)(1) of this section shall comply with the requirements specified in paragraphs (c)(1) through (c)(4) of this section.

(1) 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 paragraph (c)(1)(iv) of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal.

(ii) Except as provided in paragraph (c)(1)(v) of this section, the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

(iii) Except during the inspections required by §§ 63.120(b) of this subpart, 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 paragraph (c)(1)(i) of this section does not apply until the earlier of the dates specified in paragraphs (c)(1)(iv)(A) and (c)(1)(iv)(B) of this section.

(A) The next time the storage vessel is emptied and degassed.

(B) 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 paragraph (c)(1)(ii) of this section does not apply until the earlier of the dates specified in paragraphs (c)(1)(v)(A) and (c)(1)(v)(B) of this section.

(A) The next time the storage vessel is emptied and degassed.

(B) No later than 10 years after April 22, 1994.

(2) Each external floating roof shall meet the specifications listed in paragraphs (c)(2)(i) through (c)(2)(xii) of this section.

(i) Except for automatic bleeder vents (vacuum breaker vents) and rim space vents, each opening in the noncontact external floating roof shall provide a projection below the liquid surface except as provided in paragraph (c)(2)(xii) of this section.

(ii) 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 which is to be maintained in a closed position (i.e., no visible gap) at all times except when the cover or lid must be open for access. Covers on each access hatch and each gauge float well shall be bolted or fastened so as to be air-tight when they are closed.

(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.

(iv) Rim space vents are to be set to open only when the roof is being floated off the roof leg supports or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

(v) Automatic bleeder vents and rim space vents are to be gasketed.

(vi) Each roof drain that empties into the stored liquid is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.

(vii) Each unslotted guide pole well shall have a gasketed sliding cover or a flexible fabric sleeve seal.

(viii) Each unslotted guide pole shall have on the end of the pole a gasketed cap which is closed at all times except when gauging the liquid level or taking liquid samples.

(ix) Each slotted guide pole well shall have a gasketed sliding cover or a flexible fabric sleeve seal.

(x) Each slotted guide pole shall have a gasketed float or other device which closes off the liquid surface from the atmosphere.

(xi) Each gauge hatch/sample well shall have a gasketed cover which is closed at all times except when the hatch or well must be open for access.

(xii) If each opening in a noncontact external floating roof except for automatic bleeder vents (vacuum breaker vents) and rim space vents does not provide a projection below the liquid surface as of December 31, 1992, the requirement for providing these projections below the liquid surface does not apply until the earlier of the dates specified in paragraphs (c)(2)(xii)(A) and (c)(2)(xii)(B) of this section.

(A) The next time the storage vessel is emptied and degassed.

(B) No later than 10 years after April 22, 1994.

Note: The intent of paragraphs (c)(3) and (c)(4) of this section is to avoid having a vapor space between the floating roof and the stored liquid for extended periods. Storage vessels may be emptied for purposes such as routine storage vessel maintenance, inspections, petroleum liquid deliveries, or transfer operations. Storage vessels where liquid is left on walls, as bottom clingage, or in pools due to floor irregularity are considered completely empty.

(3) The external floating roof shall be floating on the liquid surface at all times except when the floating roof must be supported by the leg supports during the periods specified in paragraphs (c)(3)(i) through (c)(3)(iii) of this section.

(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.

(4) When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

(d) The owner or operator who elects to use an external floating roof converted to an internal floating roof (i.e., fixed roof installed above external floating roof) to comply with paragraph (a)(1) of this section shall comply with paragraphs (d)(1) and (d)(2) of this section.

(1) Comply with the requirements for internal floating roof vessels specified in paragraphs (b)(1), (2), and (3) of this section; and

(2) Comply with the requirements for deck fittings that are specified for external floating roof vessels in paragraphs (c)(2)(i) through (c)(2)(xii) of this section.

(e) The owner or operator who elects to use a closed vent system and control device, as defined in §§ 63.111 of this subpart, to comply with the requirements of paragraph (a)(1) or (a)(2) of this section shall comply with the requirements specified in paragraphs (e)(1) through (e)(5) of this section.

(1) Except as provided in paragraph (e)(2) of this section, the control device shall be designed and operated to reduce inlet emissions of total organic HAP by 95 percent or greater. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements of §§ 63.11(b) of subpart A of this part.

(2) If the owner or operator can demonstrate that a control device installed on a storage vessel on or before December 31, 1992 is designed to reduce inlet emissions of total organic HAP by greater than or equal to 90 percent but less than 95 percent, then the control device is required to be operated to reduce inlet emissions of total organic HAP by 90 percent or greater.

(3) Periods of planned routine maintenance of the control device, during which the control device does not meet the specifications of paragraph (e)(1) or (e)(2) of this section, as applicable, shall not exceed 240 hours per year.

(4) The specifications and requirements in paragraphs (e)(1) and (e)(2) of this section for control devices do not apply during periods of planned routine maintenance.

(5) The specifications and requirements in paragraphs (e)(1) and (e)(2) of this section for control devices do not apply during a control system malfunction.

(6) An owner or operator may use a combination of control devices to achieve the required reduction of total organic hazardous air pollutants specified in paragraph (e)(1) of this section. An owner or operator may use a combination of control devices installed on a storage vessel on or before December 31, 1992 to achieve the required reduction of total organic hazardous air pollutants specified in paragraph (e)(2) of this section.

(f) The owner or operator who elects to route emissions to a fuel gas system or to a process, as defined in §§ 63.111 of this subpart, to comply with the requirements of paragraph (a)(1) or (a)(2) of this section shall comply with the requirements in paragraphs (f)(1) through (f)(3) of this section, as applicable.

(1) If emissions are routed to a fuel gas system, there is no requirement to conduct a performance test or design evaluation. If emissions are routed to a process, the organic hazardous air pollutants in the emissions shall predominantly meet one of, or a combination of, the ends specified in paragraphs (f)(1)(i) through (f)(1)(iv) of this section. The owner or

operator shall comply with the compliance demonstration requirements in §§ 63.120(f).

(i) Recycled and/or consumed in the same manner as a material that fulfills the same function in that process;

(ii) Transformed by chemical reaction into materials that are not organic hazardous air pollutants;

(iii) Incorporated into a product; and/or

(iv) Recovered.

(2) If the emissions are conveyed by a system other than hard-piping, any conveyance system operated under positive pressure shall be subject to the requirements of §§ 63.148 of this subpart.

(3) The fuel gas system or process shall be operating at all times when organic hazardous air pollutants emissions are routed to it except as provided in §§ 63.102(a)(1) of subpart F of this part and in paragraphs (f)(3)(i) through (f)(3)(iii) of this section. Whenever the owner or operator by-passes the fuel gas system or process, the owner or operator shall comply with the record keeping requirement in §§ 63.123(h) of this subpart. Bypassing is permitted if the owner or operator complies with one or more of the conditions specified in paragraphs (f)(3)(i) through (f)(3)(iii) of this section.

(i) The liquid level in the storage vessel is not increased;

(ii) The emissions are routed through a closed-vent system to a control device complying with §§ 63.119(e) of this subpart; or

(iii) The total aggregate amount of time during which the emissions by-pass the fuel gas system or process during the calendar year without being routed to a control device, for all reasons (except start-ups/shutdowns/malfunctions or product changeovers of flexible operation units and periods when the storage vessel has been emptied and degassed), does not exceed 240 hours.

3. 40 CFR Part 63.120 Storage vessel provisions -- procedures to determine compliance.

(a) To demonstrate compliance with §§ 63.119(b) of this subpart (storage vessel equipped with a fixed roof and internal floating roof) or with §§ 63.119(d) of this subpart (storage vessel equipped with an external floating roof converted to an internal floating roof), the owner or operator shall comply with the requirements in paragraphs (a)(1) through (a)(7) of this section.

(1) The owner or operator 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 paragraphs (a)(2) and (a)(3) of this section.

(2) For vessels equipped with a single-seal system, the owner or operator shall perform the inspections specified in paragraphs (a)(2)(i) and (a)(2)(ii) of this section.

(i) Visually inspect the internal floating roof and the seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill, or at least once every 12 months after the compliance date specified in §§ 63.100 of subpart F of this part.

(ii) 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 specified in §§ 63.100 of subpart F of this part.

(3) For vessels equipped with a double-seal system as specified in §§ 63.119(b)(3)(iii) of this subpart, the owner or operator shall perform either the inspection required in paragraph (a)(3)(i) of this section or the inspections required in both paragraphs (a)(3)(ii) and (a)(3)(iii) of this section.

(i) The owner or operator 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 specified in §§ 63.100 of subpart F of this part; or

(ii) The owner or operator shall visually inspect the internal floating roof and the secondary seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill, or at least once every 12 months after the compliance date specified in §§ 63.100 of subpart F of this part, and

(iii) 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 specified in §§ 63.100 of subpart F of this part.

(4) If during the inspections required by paragraph (a)(2)(i) or (a)(3)(ii) of this section, the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached; or there are holes or tears in the seal fabric; or there are visible gaps between the seal and the wall of the storage vessel, the 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 paragraph (a)(2)(i) or (a)(3)(ii) of this section 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.

(5) Except as provided in paragraph (a)(6) of this section, for all the inspections required by paragraphs (a)(2)(ii), (a)(3)(i), and (a)(3)(iii) of this section, the owner or operator 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.

(6) If the inspection required by paragraph (a)(2)(ii), (a)(3)(i), or (a)(3)(iii) of this section is not planned and the owner or operator could not have known about the inspection 30 calendar days in advance of refilling the vessel, the owner or operator 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.

(7) If during the inspections required by paragraph (a)(2)(ii), (a)(3)(i), or (a)(3)(iii) of this section, the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; 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 owner or operator 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.

(b) To demonstrate compliance with §§ 63.119(c) of this subpart (storage vessel equipped with an external floating roof), the owner or operator shall comply with the requirements specified in paragraphs (b)(1) through (b)(10) of this section.

(1) Except as provided in paragraph (b)(7) of this section, the owner or operator shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the frequency specified in paragraphs (b)(1)(i) through (b)(1)(iii) of this section.

(i) 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 compliance date specified in §§ 63.100 of subpart F of this part, whichever occurs last, and at least once every 5 years thereafter.

(ii) 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 §§ 63.119(c)(1)(iv) of this subpart, measurements of gaps between the vessel wall and the primary seal shall be performed by the compliance date specified in §§ 63.100 of subpart F of this part 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 specified in paragraphs (b)(1)(i) and (b)(1)(iii) of this section thereafter.

(iii) 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 compliance date specified in §§ 63.100 of subpart F of this part and at least once per year thereafter.

(iv) If any storage vessel ceases to store organic HAP for a period of 1 year or more, or if the maximum true vapor pressure of the total organic HAP's in the stored liquid falls below the values defining Group 1 storage vessels specified in table 5 or table 6 of this subpart 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.

(2) Except as provided in paragraph (b)(7) of this section, the owner or operator shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described in paragraphs (b)(2)(i) through (b)(2)(iii) of this section.

(i) Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

(ii) Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

(iii) The total surface area of each gap described in paragraph (b)(2)(ii) of this section shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

(3) The owner or operator 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.

(4) The owner or operator 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 paragraph (b)(1)(i) and (b)(1)(ii) of this section.

(5) The primary seal shall meet the additional requirements specified in paragraphs (b)(5)(i) and (b)(5)(ii) of this section.

(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.

(ii) There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

(6) The secondary seal shall meet the additional requirements specified in paragraphs (b)(6)(i) and (b)(6)(ii) of this section.

(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 paragraph (b)(4) of this section.

(ii) There shall be no holes, tears, or other openings in the seal or seal fabric.

(7) If the owner or operator determines that it is unsafe to perform the seal gap measurements required in paragraphs (b)(1) and (b)(2) of this section or to inspect the vessel to determine compliance with paragraphs (b)(5) and (b)(6) of this section because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the owner or operator shall comply with the requirements in either paragraph (b)(7)(i) or (b)(7)(ii) of this section.

(i) The owner or operator shall measure the seal gaps or inspect the storage vessel no later than 30 calendar days after the determination that the roof is unsafe; or

(ii) The owner or operator 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 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 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.

(8) The owner or operator shall repair conditions that do not meet requirements listed in paragraphs (b)(3), (b)(4), (b)(5), and (b)(6) of this section (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 paragraph (b)(1) and (b)(2) of this section or during inspections necessary to determine compliance with paragraphs (b)(5) and (b)(6) of this section a failure is detected that 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.

(9) The owner or operator shall notify the Administrator in writing 30 calendar days in advance of any gap measurements required by paragraph (b)(1) or (b)(2) of this section to afford the Administrator the opportunity to have an observer present.

(10) The owner or operator shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed.

(i) 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 owner or operator 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.

(ii) Except as provided in paragraph (b)(10)(iii) of this section, for all the inspections required by paragraph (b)(10) of this section, the owner or operator 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.

(iii) If the inspection required by paragraph (b)(10) of this section is not planned and the owner or operator could not have known about the inspection 30 calendar days in advance of refilling the vessel with organic HAP, the owner or operator 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.

(c) To demonstrate compliance with §§ 63.119(d) of this subpart (storage vessel equipped with an external floating roof converted to an internal floating roof), the owner or operator shall comply with the requirements of paragraph (a) of this section.

(d) To demonstrate compliance with §§ 63.119(e) of this subpart (storage vessel equipped with a closed vent system and control device) using a control device other than a flare, the owner or operator shall comply with the requirements in paragraphs (d)(1) through (d)(7) of this section, except as provided in paragraph (d)(8) of this section.

(1) The owner or operator shall either prepare a design evaluation, which includes the information specified in paragraph (d)(1)(i) of this section, or submit the results of a performance test as described in paragraph (d)(1)(ii) of this section.

(i) The design evaluation shall include documentation demonstrating that the control device being used achieves the required control efficiency during reasonably expected maximum filling rate. This documentation is to include a description of the gas stream which enters the control device, including flow and organic HAP content under varying liquid level conditions, and the information specified in paragraphs (d)(1)(i)(A) through (d)(1)(i)(E) of this section, as applicable.

(A) If the control device receives vapors, gases or liquids, other than fuels, from emission points other than storage vessels subject to this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids, other than fuels, received by the control device.

(B) If an enclosed combustion device with a minimum residence time of 0.5 seconds and a minimum temperature of 760 °°C is used to meet the emission reduction requirement specified in §§ 63.119 (e)(1) or (e)(2), as applicable, documentation that those conditions exist is sufficient to meet the requirements of paragraph (d)(1)(i) of this section.

(C) Except as provided in paragraph (d)(1)(i)(B) of this section, for thermal incinerators, the design evaluation shall include the autoignition temperature of the organic HAP, the flow rate of the organic HAP emission stream, the combustion temperature, and the residence time at the combustion temperature.

(D) For carbon adsorbers, the design evaluation shall include the affinity of the organic HAP vapors for carbon, the amount of carbon in each bed, the number of beds, the humidity of the feed gases, the temperature of the feed gases, the flow rate of the organic HAP emission stream, the desorption schedule, the regeneration stream pressure or temperature, and the flow rate of the regeneration stream. For vacuum desorption, pressure drop shall be included.

(E) For condensers, the design evaluation shall include the final temperature of the organic HAP vapors, the type of condenser, and the design flow rate of the organic HAP emission stream.

(ii) If the control device used to comply with §§ 63.119(e) of this subpart is also used to comply with §§ 63.113(a)(2), §§ 63.126(b)(1), or §§ 63.139(c) of this subpart, the performance test required by §§ 63.116(c), §§ 63.128(a), or §§ 63.139(d)(1) of this

subpart is acceptable to demonstrate compliance with §§ 63.119(e) of this subpart. The owner or operator is not required to prepare a design evaluation for the control device as described in paragraph (d)(1)(i) of this section, if the performance tests meets the criteria specified in paragraphs (d)(1)(ii)(A) and (d)(1)(ii)(B) of this section.

(A) The performance test demonstrates that the control device achieves greater than or equal to the required control efficiency specified in §§ 63.119 (e)(1) or (e)(2) of this subpart, as applicable; and

(B) The performance test is submitted as part of the Notification of Compliance Status required by §§ 63.151(b) of this subpart.

(2) The owner or operator shall submit, as part of the Notification of Compliance Status required by §§ 63.151 (b) of this subpart, a monitoring plan containing the information specified in paragraph (d)(2)(i) of this section and in either (d)(2)(ii) or (d)(2)(iii) of this section.

(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 (e.g., when the liquid level in the storage vessel is being raised); and either

(ii) The documentation specified in paragraph (d)(1)(i) of this section, if the owner or operator elects to prepare a design evaluation; or

(iii) The information specified in paragraph (d)(2)(iii) (A) and (B) of this section if the owner or operator elects to submit the results of a performance test.

(A) Identification of the storage vessel and control device for which the performance test will be submitted, and

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

(3) The owner or operator shall submit, as part of the Notification of Compliance Status required by §§ 63.152(b) of this subpart, the information specified in paragraphs (d)(3)(i) and, if applicable, (d)(3)(ii) of this section.

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

(ii) Results of the performance test described in paragraph (d)(1)(ii) of this section.

(4) The owner or operator shall demonstrate compliance with the requirements of §§ 63.119(e)(3) of this subpart (planned routine maintenance of a control device, during which the control device does not meet the specifications of §§ 63.119 (e)(1) or (e)(2) of this subpart, as applicable, shall not exceed 240 hours per year) by including in each Periodic Report required by §§ 63.152(c) of this subpart the information specified in §§ 63.122(g)(1) of this subpart.

(5) The owner or operator shall monitor the parameters specified in the Notification of Compliance Status required in §§ 63.152(b) of this subpart or in the operating permit and shall operate and maintain the control device such that the monitored parameters remain within the ranges specified in the Notification of Compliance Status.

(6) Except as provided in paragraph (d)(7) of this section, each closed vent system shall be inspected as specified in §§ 63.148 of this subpart. The initial and annual inspections required by §§ 63.148(b) of this subpart shall be done during filling of the storage vessel.

(7) For any fixed roof tank and closed vent system that are operated and maintained under negative pressure, the owner or operator is not required to comply with the requirements specified in §§ 63.148 of this subpart.

(8) A design evaluation or performance test is not required, if the owner or operator uses a combustion device meeting the criteria in paragraph (d)(8)(i), (d)(8)(ii), (d)(8)(iii), or (d)(8)(iv) of this section.

(i) A boiler or process heater with a design heat input capacity of 44 megawatts or greater.

(ii) A boiler or process heater burning hazardous waste for which the owner or operator:

(A) Has been issued a final permit under 40 CFR part 270 and complies with the requirements of 40 CFR part 266, subpart H, or

(B) Has certified compliance with the interim status requirements of 40 CFR part 266, subpart H.

(iii) A hazardous waste incinerator for which the owner or operator has been issued a final permit under 40 CFR part 270 and complies with the requirements of 40 CFR part 264, subpart O or has certified compliance with the interim status requirements of 40 CFR part 265, subpart O.

(iv) A boiler or process heater into which the vent stream is introduced with the primary fuel.

(e) To demonstrate compliance with §§ 63.119(e) of this subpart (storage vessel equipped with a closed vent system and control device) using a flare, the owner or operator shall comply with the requirements in paragraphs (e)(1) through (e)(6) of this section.

(1) The owner or operator shall perform the compliance determination specified in §§ 63.11(b) of subpart A of this part.

(2) The owner or operator shall submit, as part of the Notification of Compliance Status required by §§ 63.152(b) of this subpart, the information specified in paragraphs (e)(2)(i) through (e)(2)(iii) of this section.

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

(ii) All visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the compliance determination required by paragraph (e)(1) of this section; and

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

(3) The owner or operator shall demonstrate compliance with the requirements of §§ 63.119(e)(3) of this subpart (planned routine maintenance of a flare, during which the flare does not meet the specifications of §§ 63.119(e)(1) of this subpart, shall not exceed 240 hours per year) by including in each Periodic Report required by §§ 63.152(c) of this subpart the information specified in §§ 63.122(g)(1) of this subpart.

(4) The owner or operator shall continue to meet the general control device requirements specified in §§ 63.11(b) of subpart A of this part.

(5) Except as provided in paragraph (e)(6) of this section, each closed vent system shall be inspected as specified in §§ 63.148 of this subpart. The inspections required to be performed in accordance with §§ 63.148(c) of this subpart shall be done during filling of the storage vessel.

(6) For any fixed roof tank and closed vent system that is operated and maintained under negative pressure, the owner or operator is not required to comply with the requirements specified in §§ 63.148 of this subpart.

(f) To demonstrate compliance with §§ 63.119(f) of this subpart (storage vessel routed to a process), the owner or operator shall prepare a design evaluation (or engineering assessment) that demonstrates the extent to which one or more of the ends specified in §§ 63.119(f)(1)(i) through (f)(1)(iv) are being met. The owner or operator shall submit the design evaluation as part of the Notification of Compliance Status required by §§ 63.152(b) of this subpart.

4. 40 CFR Part 63.121 Storage vessel provisions -- alternative means of emission limitation.

(a) Determination of equivalence to the reduction in emissions achieved by the requirements of §§ 63.119 (b), (c), or (d) of this subpart will be evaluated according to §§ 63.102(b) of subpart F of this part.

(b) The determination of equivalence referred to in paragraph (a) of this section will be based on the application to the Administrator which shall include the information specified in either paragraph (b)(1) or (b)(2) of this section.

(1) 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

(2) An engineering analysis that the Administrator determines is an accurate method of determining equivalence.

5. 40 CFR Part 63.122 Storage vessel provisions -- reporting.

(a) For each Group 1 storage vessel, the owner or operator shall comply with the requirements of paragraphs (a)(1) through (a)(5) of this section.

(1) The owner or operator shall submit an Initial Notification as required by §§ 63.151(b) of this subpart.

(2) [Reserved]

(3) The owner or operator shall submit a Notification of Compliance Status as required by §§ 63.152(b) of this subpart and shall submit as part of the Notification of Compliance Status the information specified in paragraph (c) of this section.

(4) The owner or operator shall submit Periodic Reports as required by §§ 63.152(c) of this subpart and shall submit as part of the Periodic Reports the information specified in paragraphs (d), (e), (f), and (g) of this section.

(5) The owner or operator shall submit, as applicable, other reports as required by §§ 63.152(d) of this subpart, containing the information specified in paragraph (h) of this section.

(b) An owner or operator who elects to comply with §§ 63.119(e) of this subpart by using a closed vent system and a control device other than a flare shall submit, as part of the Monitoring Plan, the information specified in §§ 63.120(d)(2)(i) of this subpart and the information specified in either §§ 63.120(d)(2)(ii) of this subpart or §§ 63.120(d)(2)(iii) of this subpart.

(c) An owner or operator who elects to comply with §§ 63.119(e) of this subpart by using a closed vent system and a control device shall submit, as part of the Notification of Compliance Status required by §§ 63.152(b) of this subpart, the information specified in either paragraph (c)(1) or (c)(2) of this section. An owner or operator who elects to comply with §§ 63.119(f) of this subpart by routing emissions to a process or to a fuel gas system shall submit, as part of the Notification of Compliance Status required by §§ 63.152(b) of this subpart, the information specified in paragraph (c)(3) of this section.

(1) If a control device other than a flare is used, the owner or operator shall submit the information specified in §§ 63.120(d)(3)(i) and, if applicable, (d)(3)(ii) of this subpart.

(2) If a flare is used, the owner or operator shall submit the information specified in §§ 63.120(e)(2)(i), (e)(2)(ii), and (e)(2)(iii) of this subpart.

(3) If emissions are routed to a process, the owner or operator shall submit the information specified in §§ 63.120(f). If emissions are routed to a fuel gas system, the owner or operator shall submit a statement that the emission stream is connected to the fuel gas system and whether the conveyance system is subject to the requirements of §§ 63.148.

(d) An owner or operator who elects to comply with §§ 63.119(b) of this subpart by using a fixed roof and an internal floating roof or with §§ 63.119(d) of this subpart by using an external floating roof converted to an internal floating roof shall submit, as part of the Periodic Report required under §§ 63.152(c) of this subpart, the results of each inspection conducted in accordance with §§ 63.120(a) of this subpart in which a failure is detected in the control equipment.

(1) For vessels for which annual inspections are required under §§ 63.120 (a)(2)(i) or (a)(3)(ii) of this subpart, the specifications and requirements listed in paragraphs (d)(1)(i) through (d)(1)(iii) of this section apply.

(i) A failure is defined as any time in which the internal floating roof is not resting on the surface of the liquid inside the storage vessel and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached from the internal floating roof; or there are holes, 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.

(ii) Except as provided in paragraph (d)(1)(iii) of this section, each Periodic Report shall include the date of the inspection, identification of each storage vessel in which a failure was detected, and a description of the failure. The Periodic Report shall also describe the nature of and date the repair was made or the date the storage vessel was emptied.

(iii) If an extension is utilized in accordance with §§ 63.120(a)(4) of this subpart, the owner or operator shall, in the next Periodic Report, identify the vessel; include the documentation specified in §§ 63.120(a)(4) of this subpart; and describe the date the storage vessel was emptied and the nature of and date the repair was made.

(2) For vessels for which inspections are required under §§ 63.120 (a)(2)(ii), (a)(3)(i), or (a)(3)(iii) of this subpart, the specifications and requirements listed in paragraphs (d)(2)(i) and (d)(2)(ii) of this section apply.

(i) A failure is defined as any time in which the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal (if one has been installed) has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area.

(ii) Each Periodic Report required under §§ 63.152(c) of this subpart 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.

(e) An owner or operator who elects to comply with §§ 63.119(c) of this subpart by using an external floating roof shall meet the periodic reporting requirements specified in paragraphs (e)(1), (e)(2), and (e)(3) of this section.

(1) The owner or operator shall submit, as part of the Periodic Report required under §§ 63.152(c) of this subpart, documentation of the results of each seal gap measurement made in accordance with §§ 63.120(b) of this subpart in which the requirements of §§ 63.120 (b)(3), (b)(4), (b)(5), or (b)(6) of this subpart are not met. This documentation shall include the information specified in paragraphs (e)(1)(i) through (e)(1)(iv) of this section.

(i) The date of the seal gap measurement.

(ii) The raw data obtained in the seal gap measurement and the calculations described in §§ 63.120 (b)(3) and (b)(4) of this subpart.

(iii) A description of any condition specified in §§ 63.120 (b)(5) or (b)(6) of this subpart that is not met.

(iv) 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 §§ 63.120(b)(7)(ii) or (b)(8) of this subpart, the owner or operator shall, in the next Periodic Report, identify the vessel; include the documentation specified in §§ 63.120(b)(7)(ii) or (b)(8) of this subpart, as applicable; and describe the date the vessel was emptied and the nature of and date the repair was made.

(3) The owner or operator shall submit, as part of the Periodic Report required under §§ 63.152(c) of this subpart, documentation of any failures that are identified during visual inspections required by §§ 63.120(b)(10) of this subpart. This documentation shall meet the specifications and requirements in paragraphs (e)(3)(i) and (e)(3)(ii) of this section.

(i) A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area.

(ii) Each Periodic Report required under §§ 63.152(c) of this subpart 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.

(f) An owner or operator who elects to comply with §§ 63.119(d) of this subpart by using an external floating roof converted to an internal floating roof shall comply with the periodic reporting requirements of paragraph (d) of this section.

(g) An owner or operator who elects to comply with §§ 63.119(e) of this subpart by installing a closed vent system and control device shall submit, as part of the next Periodic Report required by §§ 63.152(c) of this subpart, the information specified in paragraphs (g)(1) through (g)(3) of this section.

(1) As required by §§ 63.120(d)(4) and §§ 63.120(e)(3) of this subpart, the Periodic Report shall include the information specified in paragraphs (g)(1)(i) and (g)(1)(ii) of this section for those planned routine

maintenance operations that would require the control device not to meet the requirements of §§ 63.119 (e)(1) or (e)(2) of this subpart, as applicable.

(i) 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.

(ii) 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 §§ 63.119 (e)(1) or (e)(2) of this subpart, as applicable, due to planned routine maintenance.

(2) 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 in accordance with §§ 63.120(d)(3)(i) of this subpart. The description shall include the information specified in paragraphs (g)(2)(i) and (g)(2)(ii) of this section.

(i) Identification of the control device for which the measured parameters were outside of the established ranges, and

(ii) Cause for the measured parameters to be outside of the established ranges.

(3) 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 §§ 63.11(b) of subpart A of this part and shall include the information specified in paragraphs (g)(3)(i) and (g)(3)(ii) of this section.

(i) Identification of the flare which does not meet the general requirements specified in §§ 63.11(b) of subpart A of this part, and

(ii) Reason the flare did not meet the general requirements specified in §§ 63.11(b) of subpart A of this part.

(h) An owner or operator who elects to comply with §§ 63.119 (b), (c), or (d) of this subpart shall submit, as applicable, the reports specified in paragraphs (h)(1) and (h)(2) of this section.

(1) In order to afford the Administrator the opportunity to have an observer present, the owner or operator shall notify the Administrator of the refilling of a storage vessel that has been emptied and degassed.

(i) If the storage vessel is equipped with an internal floating roof as specified in §§ 63.119(b) of this subpart, the notification shall meet the requirements of either §§ 63.120 (a)(5) or (a)(6) of this subpart, as applicable.

(ii) If the storage vessel is equipped with an external floating roof as specified in §§ 63.119(c) of this subpart, the notification shall meet the requirements of either §§ 63.120 (b)(10)(ii) or (b)(10)(iii) of this subpart, as applicable.

(iii) If the storage vessel is equipped with an external floating roof converted into an internal floating roof as specified in §§ 63.119(d) of this subpart, the notification shall meet the requirements of either §§ 63.120 (a)(5) or (a)(6) of this subpart, as applicable.

(2) In order to afford the Administrator the opportunity to have an observer present, the owner or operator of a storage vessel equipped with an external floating roof as specified in §§ 63.119(c) of this subpart shall notify the Administrator of any seal gap measurements. This notification shall meet the requirements of §§ 63.120(b)(9) of this subpart.

6. 40 CFR Part 63.123 Storage vessel provisions -- record keeping.

(a) Each owner or operator 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 owner or operator is not required to comply with any other provisions of §§§§ 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 §§ 63.150 of this subpart.

(b) [Reserved]

(c) An owner or operator who elects to comply with §§ 63.119(b) of this subpart shall keep a record that each inspection required by §§ 63.120(a) of this subpart was performed.

(d) An owner or operator who elects to comply with §§ 63.119(c) of this subpart shall keep records describing the results of each seal gap measurement made in accordance with §§ 63.120(b) of this subpart. The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in §§ 63.120(b) (3) and (4) of this subpart.

(e) An owner or operator who elects to comply with §§ 63.119(d) of this subpart shall keep a record that each inspection required by §§ 63.120 (a) and (c) of this subpart was performed.

(f) An owner or operator who elects to comply with §§ 63.119(e) of this subpart shall keep in a readily accessible location the records specified in paragraphs (f)(1) and (f)(2) of this section.

(1) A record of the measured values of the parameters monitored in accordance with §§ 63.120(d)(5) of this subpart.

(2) A record of the planned routine maintenance performed on the control device including the duration of each time the control device does not meet the specifications of §§ 63.119 (e)(1) or (e)(2) of this subpart, as applicable, due to the planned routine maintenance. Such a record shall include the information specified in paragraphs (f)(2)(i) and (f)(2)(ii) of this section.

(i) The first time of day and date the requirements of §§ 63.119 (e)(1) or (e)(2) of this subpart, as applicable, were not met at the beginning of the planned routine maintenance, and

(ii) The first time of day and date the requirements of §§ 63.119 (e)(1) or (e)(2) of this subpart, as applicable, were met at the conclusion of the planned routine maintenance.

(g) An owner or operator who elects to utilize an extension in emptying a storage vessel in accordance with §§ 63.120 (a)(4), (b)(7)(ii), or (b)(8) of this subpart shall keep in a readily accessible location, the documentation specified in §§ 63.120 (a)(4), (b)(7)(ii), or (b)(8), as applicable.

(h) An owner or operator who uses the by-pass provisions of §§ 63.119(f)(3) of this subpart shall keep in a readily accessible location the records specified in paragraphs (h)(1) through (h)(3) of this section.

(1) The reason it was necessary to by-pass the process equipment or fuel gas system;

(2) The duration of the period when the process equipment or fuel gas system was by-passed;

(3) Documentation or certification of compliance with the applicable provisions of §§ 63.119(f)(3)(i) through §§ 63.119(f)(3)(iii).

MACT Group 2 Storage Vessels

7. The permittee shall operate the emissions units specified in Part II - Section A.VI.8 as a Group 2 storage vessels as defined in 40 CFR Part 63.641. To be classified as a Group 1

storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because these emissions units do not meet the Group 1 definition as stated in 40 CFR Part 63.641, these emissions unit shall be operated as a Group 2 storage vessels. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in Part II - Section A.VI.9 for the Group 2 storage vessels while it is in operation and report any changes in the group status of the storage vessels as specified in Part II - Section A.VI.10. Neither OAC rule 3745-21-09(L) or (Z) apply to these emissions units.

8. The following are to operated as group 2 storage vessels under the MACT:

   T023, T024, T035, T038, T041, T044, T045, T049, T153, T154, T099, T102, T053, T056, T057, T059, T062 thru T064, T077 thru T079, T082 thruT091, T093 thru T098, T134, and T130.

9. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel. All records shall be retained for as long as the storage vessel remains in operation or there is a change in the vessel's group category. Records shall be maintained in a manner that they can be readily accessible. Records may be maintained in a hard copy format or in computer-readable format.

10. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. The permittee shall also submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Canton City Health Department, Air Pollution Control Division within 30 days of becoming aware of the occurrence.

11. The permittee shall demonstrate compliance with the terms and conditions of this section by record keeping as specified in Part II - Section A.VI.9.

40 CFR Part 60, Subpart Kb Requirements for Storage Vessels

12. 60.112 Standard for volatile organic compounds (VOC).

    (a) The owner or operator of any storage vessel to which this subpart applies shall store petroleum liquids as follows:

        (1) If the true vapor pressure of the petroleum liquid, as stored, is equal to or greater than 78 mm Hg (1.5 psia) but not greater than 570 mm Hg (11.1

psia), the storage vessel shall be equipped with a floating roof, a vapor recovery system, or their equivalents.

(2) If the true vapor pressure of the petroleum liquid as stored is greater than 570 mm Hg (11.1 psia), the storage vessel shall be equipped with a vapor recovery system or its equivalent.

13. 60.110 Applicability and designation of affected facility.

(a) Except as provided in §§ 60.110(b), the affected facility to which this subpart applies is each storage vessel for petroleum liquids which has a storage capacity greater than 151,412 liters (40,000 gallons).

(b) This subpart does not apply to storage vessels for petroleum or condensate stored, processed, and/or treated at a drilling and production facility prior to custody transfer.

(c) Subject to the requirements of this subpart is any facility under paragraph (a) of this section which:

(1) Has a capacity greater than 151, 416 liters (40,000 gallons), but not exceeding 246,052 liters (65,000 gallons), and commences construction or modification after March 8, 1974, and prior to May 19, 1978.

(2) Has a capacity greater than 246,052 liters (65,000 gallons) and commences construction or modification after June 11, 1973, and prior to May 19, 1978.

14. 60.113 Monitoring of operations.

(a) Except as provided in paragraph (d) of this section, the owner or operator subject to this subpart 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.

(b) 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).

(c) 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).

(d) The following are exempt from the requirements of this section:

(1) Each owner or operator of each affected facility which stores petroleum liquids 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).

(2) Each owner or operator of each affected facility equipped with a vapor recovery and return or disposal system in accordance with the requirements of §§ 60.112.

15. 60.112b Standard for volatile organic compounds (VOC).

(a) The owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m 3 containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 5.2 kPa but less than 76.6 kPa or with a design capacity greater than or equal to 75 m 3 but less than 151 m 3 containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 27.6 kPa but less than 76.6 kPa, shall equip each storage vessel with one of the following:

(1) A fixed roof in combination with an internal floating roof meeting the following specifications:

(i) 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.

(ii) 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:

(A) 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.

(B) 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.

(C) 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.

(iii) 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.

(iv) 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.

(v) 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.

(vi) 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.

(vii) 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.

(viii) 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.

(ix) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

(2) An external floating roof. 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.

(A) The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in §§ 60.113b(b)(4), the seal shall completely cover the annular space between the edge of the floating roof and tank wall.

(B) 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 §§ 60.113b(b)(4).

(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.

(iii) 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.

(3) A closed vent system and control device meeting the following specifications:

(i) The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in part 60, subpart VV, §§ 60.485(b).

(ii) The control device shall be designed and operated to reduce inlet VOC emissions by 95 percent or greater. If a flare is used as the control device, it shall meet the specifications described in the

general control device requirements (§§ 60.18) of the General Provisions.

(4) A system equivalent to those described in paragraphs (a)(1), (a)(2), or (a)(3) of this section as provided in §§ 60.114b of this subpart.

(b) The owner or operator of each storage vessel with a design capacity greater than or equal to 75 m3 which contains a VOL that, as stored, has a maximum true vapor pressure greater than or equal to 76.6 kPa shall equip each storage vessel with one of the following:

(1) A closed vent system and control device as specified in §§ 60.112b(a)(3).

(2) A system equivalent to that described in paragraph (b)(1) as provided in §§ 60.114b of this subpart.

16. 60.113b Testing and procedures.

The owner or operator of each storage vessel as specified in §§ 60.112b(a) shall meet the requirements of paragraph (a), (b), or (c) of this section. The applicable paragraph for a particular storage vessel depends on the control equipment installed to meet the requirements of §§ 60.112b.

(a) After installing the control equipment required to meet §§ 60.112b(a)(1) (permanently affixed roof and internal floating roof), each owner or operator shall:

(1) 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 owner or operator shall repair the items before filling the storage vessel.

(2) 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 owner or operator 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 §§ 60.115b(a)(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.

(3) For vessels equipped with a double-seal system as specified in §§ 60.112b(a)(1)(ii)(B):

(i) Visually inspect the vessel as specified in paragraph (a)(4) of this section at least every 5 years; or

(ii) Visually inspect the vessel as specified in paragraph (a)(2) of this section.

(4) 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 owner or operator 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 paragraphs (a)(2) and (a)(3)(ii) of this section and at intervals no greater than 5 years in the case of vessels specified in paragraph (a)(3)(i) of this section.

(5) 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 paragraphs (a)(1) and (a)(4) of this section to afford the Administrator the opportunity to have an observer present. If the inspection required by paragraph (a)(4) of this section is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, the owner or operator 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.

(b) After installing the control equipment required to meet §§ 60.112b(a)(2) (external floating roof), the owner or operator shall:

(1) Determine the gap areas and maximum gap widths, between the primary seal and the wall of the storage vessel and between the secondary seal and the wall of the storage vessel according to the following frequency.

(i) 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.

(ii) 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.

(iii) If any source ceases to store VOL for a period of 1 year or more, subsequent introduction of VOL into the vessel shall be considered an initial fill for the purposes of paragraphs (b)(1)(i) and (b)(1)(ii) of this section.

(2) Determine gap widths and areas 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 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.

(iii) The total surface area of each gap described in paragraph (b)(2)(ii) of this section 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.

(3) 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 paragraph (b)(4) of this section.

(4) Make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in (b)(4) (i) and (ii) of this section:

(i) The accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 Cm 2 per meter of tank diameter, and the width of any portion of any gap shall not exceed 3.81 cm.

(A) One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61 cm above the stored liquid surface.

(B) There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

(ii) The secondary seal is to meet the following requirements:

(A) 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 paragraph (b)(2)(iii) of this section.

(B) The accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 cm2 per meter of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm.

(C) There are to be no holes, tears, or other openings in the seal or seal fabric.

(iii) If a failure that is detected during inspections required in paragraph (b)(1) of §§ 60.113b(b) 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 §§ 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.

(5) Notify the Administrator 30 days in advance of any gap measurements required by paragraph (b)(1) of this section to afford the Administrator the opportunity to have an observer present.

(6) Visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed.

(i) 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 owner or operator 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.

(ii) For all the inspections required by paragraph (b)(6) of this section, the owner or operator 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 paragraph (b)(6) of this section is not planned and the owner or operator could not have known about the inspection 30 days in advance of refilling the tank, the owner or operator 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.

(c) The owner or operator of each source that is equipped with a closed vent system and control device as required in §§ 60.112b (a)(3) or (b)(2) (other than a flare) is exempt from §§ 60.8 of the General Provisions and shall meet the following requirements.

(1) Submit for approval by the Administrator as an attachment to the notification required by §§ 60.7(a)(1) or, if the facility is exempt from §§ 60.7(a)(1), as an attachment to the notification required by §§ 60.7(a)(2), an operating plan containing the information listed below.

(i) Documentation demonstrating that the control device will achieve the required control efficiency during maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If the control device or the closed vent capture system receives vapors, gases, or liquids other than fuels from sources that are not designated sources under this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816 °C is used to meet the 95 percent requirement, documentation that those conditions will exist is sufficient to meet the requirements of this paragraph.

(ii) A description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters).

(2) Operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance

with the operating plan submitted to the Administrator in accordance with paragraph (c)(1) of this section, unless the plan was modified by the Administrator during the review process. In this case, the modified plan applies.

(d) The owner or operator of each source that is equipped with a closed vent system and a flare to meet the requirements in §§ 60.112b (a)(3) or (b)(2) shall meet the requirements as specified in the general control device requirements, §§ 60.18 (e) and (f).

17. 60.114b Alternative means of emission limitation.

(a) If, in the Administrator's judgment, an alternative means of emission limitation will achieve a reduction in emissions at least equivalent to the reduction in emissions achieved by any requirement in §§ 60.112b, the Administrator will publish in the Federal Register a notice permitting the use of the alternative means for purposes of compliance with that requirement.

(b) Any notice under paragraph (a) of this section will be published only after notice and an opportunity for a hearing.

(c) Any person seeking permission under this section shall submit to the Administrator a written application including:

(1) An actual emissions test that uses a full-sized or scale-model storage vessel that accurately collects and measures all VOC emissions from a given control device and that accurately simulates wind and accounts for other emission variables such as temperature and barometric pressure.

(2) An engineering evaluation that the Administrator determines is an accurate method of determining equivalence.

(d) The Administrator may condition the permission on requirements that may be necessary to ensure operation and maintenance to achieve the same emissions reduction as specified in §§ 60.112b.

18. 60.115b Reporting and record keeping requirements.

The owner or operator of each storage vessel as specified in §§ 60.112b(a) shall keep records and furnish reports as required by paragraphs (a), (b), or (c) of this section depending upon the control equipment installed to meet the requirements of §§ 60.112b. The owner or operator shall keep copies of all reports and records required by this section, except for the record required by (c)(1), for at least 2 years. The record required by (c)(1) will be kept for the life of the control equipment.

(a) After installing control equipment in accordance with §§ 60.112b(a)(1) (fixed roof and internal floating roof), the owner or operator shall meet the following requirements.

(1) Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of §§ 60.112b(a)(1) and §§ 60.113b(a)(1). This report shall be an attachment to the notification required by §§ 60.7(a)(3).

(2) Keep a record of each inspection performed as required by §§ 60.113b (a)(1), (a)(2), (a)(3), and (a)(4). 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).

(3) If any of the conditions described in §§ 60.113b(a)(2) are detected during the annual visual inspection required by §§ 60.113b(a)(2), 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 §§ 60.113b(a)(3) 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 §§ 60.113b(a)(3)(ii), 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 §§ 61.112b(a)(1) or §§ 60.113b(a)(3) and list each repair made.

(b) After installing control equipment in accordance with §§ 61.112b(a)(2) (external floating roof), the owner or operator shall meet the following requirements.

(1) Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of §§ 60.112b(a)(2) and §§ 60.113b(b)(2), (b)(3), and (b)(4). This report shall be an attachment to the notification required by §§ 60.7(a)(3).

(2) Within 60 days of performing the seal gap measurements required by §§ 60.113b(b)(1), furnish the Administrator with a report that contains:

(i) The date of measurement.

(ii) The raw data obtained in the measurement.

(iii) The calculations described in §§ 60.113b (b)(2) and (b)(3).

(3) Keep a record of each gap measurement performed as required by §§ 60.113b(b). Each record shall identify the storage vessel in which the measurement was performed and shall contain:

(i) The date of measurement.

(ii) The raw data obtained in the measurement.

(iii) The calculations described in §§ 60.113b (b)(2) and (b)(3).

(4) After each seal gap measurement that detects gaps exceeding the limitations specified by §§ 60.113b(b)(4), submit a report to the Administrator within 30 days of the inspection. The report will identify the vessel and contain the information specified in paragraph (b)(2) of this section and the date the vessel was emptied or the repairs made and date of repair.

(c) After installing control equipment in accordance with §§ 60.112b (a)(3) or (b)(1) (closed vent system and control device other than a flare), the owner or operator shall keep the following records.

(1) A copy of the operating plan.

(2) A record of the measured values of the parameters monitored in accordance with §§ 60.113b(c)(2).

(d) After installing a closed vent system and flare to comply with §§ 60.112b, the owner or operator shall meet the following requirements.

(1) A report containing the measurements required by §§ 60.18(f) (1), (2), (3), (4), (5), and (6) shall be furnished to the Administrator as required by §§ 60.8 of the General Provisions. This report shall be submitted within 6 months of the initial start-up date.

(2) Records shall be kept of all periods of operation during which the flare pilot flame is absent.

(3) Semiannual reports of all periods recorded under §§ 60.115b(d)(2) in which the pilot flame was absent shall be furnished to the Administrator.

19. 60.116b Monitoring of operations.

(a) The owner or operator 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 owner or operator of each storage vessel as specified in §§ 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.

(c) Except as provided in paragraphs (f) and (g) of this section, the owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m3 storing a liquid with a maximum true vapor pressure greater than or equal to 3.5 kPa or with a design capacity greater than or equal to 75 m3 but less than 151 m3 storing a liquid with a maximum true vapor pressure greater than or equal to 15.0 kPa shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.

(d) Except as provided in paragraph (g) of this section, the owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m3 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 m3 but less than 151 m3 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.

(e) Available data on the storage temperature may be used to determine the maximum true vapor pressure as determined below.

(1) 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.

(2) For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(i) 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 §§ 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).

(ii) 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.

(3) For other liquids, the vapor pressure:

(i) May be obtained from standard reference texts, or

(ii) Determined by ASTM D2879-83, 96, or 97 (incorporated by reference -- see §§ 60.17); or

(iii) Measured by an appropriate method approved by the Administrator; or

(iv) Calculated by an appropriate method approved by the Administrator.

(f) The owner or operator of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements.

(1) 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 paragraph (e) of this section.

(2) For vessels in which the vapor pressure of the anticipated liquid composition is above the cutoff for monitoring but below the cutoff for controls as defined in §§60.112b(a), 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 D2879-83, 96, or 97 (incorporated by reference -- see §§ 60.17); or

(ii) ASTM D323-82 or 94 (incorporated by reference -- see §§60.17); or

(iii) As measured by an appropriate method as approved by the Administrator.

(g) The owner or operator of each vessel equipped with a closed vent system and control device meeting the specification of §§ 60.112b or with emissions reductions equipment as specified in 40 CFR 65.42(b)(4), (b)(5), (b)(6), or (c) is exempt from the requirements of paragraphs (c) and (d) of this section.

Subpart GGGGG--National Emission Standards for Hazardous Air Pollutants: Site Remediation

What this Subpart Covers

20. <u>40 CFR 63.7880 What is the purpose of this subpart?</u>

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.

21. <u>40 CFR 63.7881 Am I subject to this subpart?</u>

(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.

22. 40 CFR 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.

23. 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 October 9, 2006.

(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 October 8, 2003, you must comply with each emission limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you by October 8, 2003.

(2) If the affected source's initial startup date is after October 8, 2003, 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 October 8, 2003, 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 October 9, 2006.

(2) If the affected source's initial startup date is after October 8, 2003, 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

24. 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.

25. 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.

26. <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.

27. 63.7887 What are the general standards I must meet for my affected equipment leak sources?

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.

28. 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

29. 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.

30. <u>63.7891 How do I demonstrate initial compliance with the emissions limitations and work practice standards for process vents</u>?

(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.

31. <u>63.7892 What are my inspection and monitoring requirements for process vents</u>?

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.

32. <u>63.7893 How do I demonstrate continuous compliance with the emissions limitations and work practice standards for process vents</u>?

(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

33. <u>63.7895 What emissions limitations and work practice standards must I meet for tanks</u>?

(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).

34. <u>63.7896 How do I demonstrate initial compliance with the emissions limitations and work practice standards for tanks</u>?

(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.

35. <u>63.7897 What are my inspection and monitoring requirements for tanks</u>?

(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.

36. <u>63.7898 How do I demonstrate continuous compliance with the emissions limitations and work practice standards for tanks</u>?

(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

37. 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).

38. <u>63.7901 How do I demonstrate initial compliance with the emissions limitations and work practice standards for containers</u>?

(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.

39. <u>63.7902 What are my inspection and monitoring requirements for containers</u>?

(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.

40. <u>63.7903 How do I demonstrate continuous compliance with the emissions limitations and work practice standards for containers</u>?

(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

41. 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).

42. 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.

43. 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.

44. 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

45. 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).

46. <u>63.7911 How do I demonstrate initial compliance with the emissions limitations and work practice standards for separators</u>?

(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).

47. <u>63.7912 What are my inspection and monitoring requirements for separators</u>?

(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).

48. <u>63.7913 How do I demonstrate continuous compliance with the emissions limitations and work practice standards for separators</u>?

(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

49. 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).

50. <u>63.7916 How do I demonstrate initial compliance with the emissions limitations and work practice standards for transfer systems?</u>

(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.

51. <u>63.7917 What are my inspection and monitoring requirements for transfer systems</u>?

(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.

52. 63.7918 How do I demonstrate continuous compliance with the emissions limitations and work practice standards for transfer systems?

(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

53. <u>63.7920 What emissions limitations and work practice standards must I meet for equipment leaks?</u>

(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).

54. <u>63.7921 How do I demonstrate initial compliance with the emissions limitations and work practice standards for equipment leaks</u>?

(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).

55. <u>63.7922 How do I demonstrate continuous compliance with the work practice standards for equipment leaks</u>?

(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

56. 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).

57. <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.

58. <u>63.7927 What are my inspection and monitoring requirements for closed vent systems and control devices</u>?

(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.

59. <u>63.7928 How do I demonstrate continuous compliance with the emissions limitations and work practice standards for closed vent systems and control devices</u>?

(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

60. 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.

61. <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.

62. <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.

63. <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

64. 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).

65. 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.

$$R_v = \frac{\sum_{j=1}^{n} E_i - \sum_{j=1}^{n} E_o}{\sum_{j=1}^{n} E_i} x\ 100 \quad \text{(Eq. 5)}$$

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).

66. <u>63.7942 When must I conduct subsequent performance tests</u>?

For non-flare control devices, you must conduct performance tests at any time the EPA requires you to according to §63.7(3).

67. <u>63.7943 How do I determine the average VOHAP concentration of my remediation material</u>?

(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:

$$\bar{C} = \frac{1}{Q_T} \times \sum_{i=1}^{n} (Q_i \times C_i) \qquad \text{(Eq. 1)}$$

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.

68. <u>63.7944 How do I determine the maximum HAP vapor pressure of my remediation material</u>?

(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

69. 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.

70. 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.

71. 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

72. 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 October 8, 2003, you must submit an Initial Notification not later than 120 calendar days after October 8, 2003.

(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.

73. 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.

74. <u>63.7952 What records must I keep</u>?

(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.

75. <u>63.7953 In what form and how long must I keep my records?</u>

(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

76. 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.

77. 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.

78. 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

79. 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:

A. $f_{m\ 305}$ = 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.

80. 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)

81. As stated in §63.7940, you must comply with the applicable General Provisions requirements according to the following table:

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

82. The following insignificant emissions units are located at this facility:

F001 - roadways and parking;
F002 - roadways and parking;
J004 - butane loading rack (permit to install 15-496);
P008 - vacuum unit;
P017 - storm water emergency diesel pump (permit to install 15-745);
P019 - fire water emergency diesel pump (permit to install 15-1199);
Z014 - boiler house firewater emergency diesel pump;
P014 - HF alky regenerator tower and isobutane vaporizer (permit to install 15-1367);
P015 - flare header drain accumulator system (permit to install 15-606);
T052 - flux (#22) (permit to install 15-362);
T134 - fuel oil (#23) (permit to install 15-443);
T155 - storm water emergency diesel (permit to install 15- 745);
T157 - recovered hydrocarbon (HC-1) (permit to install 15-874);
T158 - recovered hydrocarbon (HC-2) (permit to install 15-874);
T159 - recovered hydrocarbon (HC-3) (permit to install 15-874);
T160 - gasoline additive (#250) (permit to install 15-876);
T164 - fire training ground gasoline (FT-1) (permit to install 15-1074);
T165 - fire training ground diesel (FT-2) (permit to install 15-1074);
T166 - high sulfur diesel (#252) (permit to install 15-1100);
T173 - WWT Sludge (#270) (permit to install 15- 01401); and
T174 - distillate fixed roof tank (#268)(permit to install 15-1406).

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:

J002 - asphalt loading rack;
J003 - propane loading rack;
P018 - FCC MagnaCat system;
T035 - high sulfur diesel (#65);
T045 - low sulfur diesel(# 226)
T049 - low sulfur diesel(# 120)
T052 - flux (#22);
T053 - diesel (#21);
T056 - high sulfur diesel (#47);
T057 - FCC charge (#55);
T059 - flux (#128);
T062 - low sulfur diesel/kerosene (#43);
T063 - low sulfur diesel (#46);
T064 - low sulfur diesel (#64);
T077 - FCC charge (#51);
T078 - fuel oil (#53) OOS;
T079 - transmix (#112);
T082 - flux (#121);
T083 - asphalt (#122);
T084 - low Metal vac Btms for FCC (#127);

T085 - asphalt (#203);
T086 - asphalt (#204);
T087 - asphalt (#205);
T088 - asphalt (#206);
T089 - #6 oil (#207);
T090 - asphalt (#209);
T091 - asphalt (#210);
T093 - asphalt (#223);
T094 - asphalt (#228);
T095 - asphalt (#229);
T096 - asphalt (#230);
T097 - asphalt (#231);
T098 - low metal vac Btms for FCC (#233);
T099 - storm water (#235);
T100 - foul water (#237);
T101 - WW clarifier (#T 51);
T104 - well water (# 31);
T106 - WW equalization tank (#T 40);
T107 - WW clarifier (#T 41);
T108 - phosphoric acid (#T 3);
T109 - butane storage (# 201);
T110 - butane storage (# 202);
T111 - propane storage (# 211);
T112 - propane storage (# 212);
T113 - propane storage (# 218);
T114 - butane storage (# 220);
T115 - butane storage (# 221);
T116 - propane storage (# 222);
T117 - isobutane storage (# 227);
T118 - sulfuric acid storage (#T 2);
T119 - caustic soda storage (# 111);
T120 - caustic soda storage (# 113);
T121 - caustic soda storage (# 114);
T122 - sulfur (# 300, pit);
T123 - MEA;
T124 - MDEA;
T125 - gasoline additives (# 130);
T127 - brine (# 234);
T129 - pour point depressant (# 238);
T130 - kerosene (#7);
T131 - bio sludge (#11);
T135 - sulfuric acid;
T136 - lime (# 14-F-14);
T137 - WWT nurse tank (# 14-F-32);
T138 - ferric chloride (# 14-F-16);
T139 - precoat storage hopper (# 14-F-21);
T140 - sludge (# 14-F-17);
T141 - caustic (# 14-F-12);
Z001 - sulfur (34-TK-1);
Z002 - hydrocarbon recovery (HC-6);
Z003 - hydrocarbon recovery (HC-7);
Z004 - fire training ground (FT-3);
Z005 - alky methanol (27-TK-1);
Z006 - north area flare methanol (20-TK-1);
Z007 - API separator sludge diesel pump;
Z008 - contractor vehicle gasoline dispensing facility;
Z010 - isobutane unloading rack;
Z011 - sulfur loading rack;
Z012 - crude unloading;
Z013 - gasoline/diesel fuel dispensing;
Z018 - biosludge (#248);
Z020 - empty drum washing;
Z021 - coalescer element replacement;
Z022 - filter replacement;
Z023 - chemical storage tanks/ totes/ drums;
Z024 - analyzer vent calibration gases to the atmosphere;
Z025 - lube oil drums / cans for pumps / compressors;
Z026 - filling / draining salt driers;
Z027 - general maintenance; welding/ pumps & compressors etc.;
Z028 - draining compressor bottles;
Z029 - heater de-coking / pigging;
Z030 - catalyst unloading/ loading;
Z031 - start-up shutdown vents;
Z032 - diesel generators used for lights, air blowers, welders etc.;
Z033 - boiler drum intermittant blowdowns+E4;
Z034 - fuel gas filter/ coalescer/ ko pot drainings;
Z035 - deareator vent;
Z036 - KOH tank vent;
Z037 - CBM pit vapors;
Z038 - manual gauging of sulfur pit;
Z039 - sulfur drop-out leg maintenance (rodding out);
Z040 - bubblers in the alky unit;
Z041 - hydrogen truck emissions from hoses;
Z042 - loading HF acid via truck, hose disconnections;
Z043 - loading KOH via truck, hose disconnections;
Z044 - filling salt pits & driers;
Z045 - lime loading/ unloading & vents on vessels;

Z046 - DAF vapors;
Z047 - draining water from tanks;
Z048 - hand gauging tanks;
Z049 - knock engine vapors;
Z050 - zeolite / coal filter replacement;
Z051 - soft water tank vent;
Z052 - reactivator & clear well vapors;
Z053 - asphalt oxidizer cleanings;
Z054 - loading / unloading rail cars (disconnecting hoses);
Z055 - sludge press vapors;
Z056 - unloading chemicals into storage vessels;
Z057 - equipment preparation for maintenance;
Z058 - purging lines;
Z059 - cleaning unit;
Z060 - pressure surveys;
Z061 - sample collection;
Z062 - water KO pot drainings;
Z063 - backwashing exchangers;
Z064 - catalyst sulfiding;
Z065 - cleaning pump strainers;
Z066 - instrument maintenance;
Z067 - cleaning / draining sight glasses;
Z068 - cleaning control room;
Z069 - smoke shanty vent;
Z070 - condensate pot vents;
Z071 - instrument purging;
Z072 - vacuum truck operations;
Z073 - painting/ sandblasting;
Z074 - tank cleanings;
Z075 - heat exchanger bundle cleanings;
Z076 - emergency diesel engines;
Z077 - MACT hydrocarbon recovery tanks (T1,T2);
Z078 - brine (# 241);
Z079 - diesel (# 258);
Z080 - water (# 262);
Z081 - diesel (# 264);
Z082 - red dye additive (# 265);
Z083 - brine (# 269);
Z084 - spent caustic (# 271);
Z085 - WWT new tank to replace T-40 (# 272);
Z086 - butane cavern (# 350);
Z087 - oily storm water (# 14-F-30);
Z088 - ferric chloride (# 14-F-56);
Z089 - caustic (# 14-F-63); and
Z090 - construction fuel tanks.

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
Process heat exchanger for heating crude oil with a maximum heat input of 193 mmBtu/hr, fired with refinery fuel gas, natural gas and/or landfill gas (designated as 4-0-B-6).	40 CFR Part 60.104(a)(1)	See A.I.2.a below.
	40 CFR 52.1881(b)(27)(ix)	0.025 pound of sulfur dioxide (SO2) per mmBtu of actual heat input
	OAC rule 3745-17-10(B)(1)	0.020 pound of particulates per mmBtu 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 3745-31-05(A)(3) (PTI 15-023)	The requirements established pursuant to this rule are equivalent to the requirements of 40 CFR Part 60.104(a)(1), 40 CFR Part 52.1881(b)(27)(ix), OAC rule 3745-17-10(B)(1), and OAC rule 3745-17-07(A).

2. Additional Terms and Conditions

2.a The permittee shall not burn any mixture of refinery fuel gas, natural gas and/or landfill gas in this emissions unit that contains hydrogen sulfide (H2S) in excess of 230 mg/dscm (0.10 gr/dscf).

II. Operational Restrictions

1. The permittee shall burn only refinery fuel gas, natural gas and/or landfill gas in this emissions unit. Hereinafter, this mixture of fuel gases shall be referred to as “refinery fuel gas”. The sulfur content of the refinery fuel gas burned in this emissions unit shall comply with the allowable SO2 emission limitation specified in section A.I.

2. All refinery fuel gas burned by this emissions unit shall be supplied from the south area fuel drum.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall continuously sample and analyze the refinery fuel gas for sulfur content using the H2S CEMS required in section A.III.2 and maintain records of the analytical results.

2. The permittee shall operate and maintain existing equipment to continuously monitor and record the concentrations of H2S in the refinery fuel gas burned in this emissions unit, in units of ppm. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13. The span value for this instrument shall be 425 mg/dscm of H2S.

3. A statement of certification of the existing H2S 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 Canton City Health Department, Air Pollution Control Division upon request.

4. The permittee shall maintain records of all data obtained by the H2S CEMS including, but not limited to, parts per million (ppm) of H2S, ppm of H2S as a rolling, 3-hour 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 CEMS that is designed to ensure continuous valid and representative readings of H2S. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. Records for the monitoring system must be kept on site and available for inspection during regular office hours.

6. The permittee shall collect samples, at least three times per week, of the refinery fuel gas for gas chromatographic analysis. The permittee shall collect refinery fuel gas samples using procedures that will ensure that sample containers are adequately purged prior to sample collection, thereby, ensuring a representative fuel gas sample. The permittee shall maintain a copy of the sampling procedures on site.

7. 7. The permittee shall maintain daily records of the actual heating value of the refinery fuel gas as burned in this emissions unit. The actual heating value (H), in Btu per scf, of the refinery fuel gas shall be calculated as follows from the results of a daily refinery fuel gas compositional analysis using gas chromatography:

   H = summation of (hi x mi)

   mi = the mass fraction of each chemical compound detected in the refinery fuel gas using chromatographic analysis; and

   hi = the higher heating value of each chemical compound detected in the refinery fuel gas, in Btu per pound of chemical, as found in the GPSA manual.

8. 8. The permittee shall use one of the following methods to conduct the compositional analysis of the refinery fuel gas samples:

   ASTM D1945-96
   ASTM D1945-96 (Wasson Modification)
   GPA Method 2261-90

   When using the Wasson Modification of ASTM Method D1945-96, the permittee shall follow, at a minimum, QA/QC requirements specified in ASTM D1945-96. The permittee shall also operate and maintain the Wasson gas chromatographic instrumentation according to the manufacturer's specifications and recommendations. Alternative, equivalent methods may be used upon written approval by the Canton City Health Department, Air Pollution Control Division.

9. 9. The permittee shall maintain daily records of each calculated, rolling, 3-hour average of the sulfur dioxide emission rate, in pounds per MMBtu, discharged from this emissions unit. The sulfur dioxide emission rate shall be calculated as follows:

   [(Rolling, 3-hour average H2S concentration, in ppmv) x (1 scf H2S/1x10^6 ppmv) x (1 mole H2S/379 scf H2S) x (1 mole S02/mole H2S) x (64 pounds of S02/mole S02)] / (daily recorded heating value of the refinery fuel gas) = sulfur dioxide mass emission rate.

10. For each day during which the permittee burns a fuel other than refinery fuel gas, the permittee shall maintain a record of the type, quantity, sulfur content, in pound of sulfur per mmdscf, and heating value, in Btu/dscf, of the fuel burned.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each rolling, 3-hour average SO2 emission rate, as calculated in section A.III.9, that exceeds the SO2 emission limitation of 0.025 pound of SO2 per mmBtu of actual heat input for the burning of refinery fuel gas.

2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas is burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

3. The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Canton City Health Department, Air Pollution Control Division 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 in the quarterly report.

4. Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit H2S concentration reports within thirty (30) days following the end of each calendar quarter to the Canton City Health Department, Air Pollution Control Division. These reports shall contain the date, commencement and completion times,

and durations of all instances of rolling, 3-hour H2S concentrations in excess of the 0.10 gr/dscf limitation, and the corrective actions taken (if any). If there are no concentrations of H2S in the refinery fuel gas 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.

V. Testing Requirements

1. Compliance with the emission limitations and control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

0.025 pound of S02 per mmBtu of actual heat input

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in sections A.III.1 and A.III.6 through A.III.9.

If required, the permittee shall demonstrate compliance with the above SO2 emission limitation in accordance with the procedures and methods specified in 40 CFR Part 60, Appendix A, Method 6 or one of its approved modifications and OAC rule 3745-18-04.

b. Emission Limitation:

0.020 pound of particulates per mmBtu of actual heat input

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the above particulate emission limitation in accordance with the procedures and methods specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and OAC rule 3745-17-03(B)(10).

c. Emission Limitation:

20% opacity as a 6-minute average, except as provided by rule

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the requirements in OAC rule 3745-17-03(B)(1) and the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

d. Emission Limitation:

0.10 gr/dscf of H2S

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.12. If required, the permittee shall demonstrate compliance with the above H2S emission limitation in accordance with the methods and procedures specified in 40 CFR Part 60, Method 11.

2. The permittee shall perform on-going quality assurance tests for the H2S CEMS as required in section A.III.5 in accordance with the procedures specified in 40 CFR Part 60, Appendix F.

3. The permittee shall conduct annual H2S concentration testing of the refinery fuel gas from the south area fuel drum as required by 40 CFR Part 60.13(c) and section A.III.5 to verify H2S CEMS performance in accordance with the following requirements:

   a. The emissions testing shall be conducted using 40 CFR Part 60, Appendix A, Method 11 for the purpose of conducting relative accuracy evaluations.

   b. The test shall be conducted while the emissions units associated with the south area fuel drum are operating at greater than 50% of normal load.

   Not later than 30 days prior to the proposed test date(s), the permittee shall submit an Intent to Test (ITT) Notification to the Canton City Health Department, Air Pollution Control Division. The ITT Notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests and the persons who will be conducting the tests. Failure to submit such notification for review and approval prior to the test may result in the refusal to accept the ITT.

   Personnel from the Canton City Health Department, Air Pollution Control Division shall be permitted to witness the tests, 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 shall be signed by the person or persons responsible for the tests and submitted to the Canton City Health Department, Air Pollution Control Division within 30 days following completion of the tests.

VI. Miscellaneous Requirements

1. On August 28, 2001, Marathon Ashland Petroleum, LLC (MAP) and the United States of America entered into a global settlement agreement(Civil NO. 01-40119) entailing several air quality regulations. As part of the settlement, MAP agreed to achieve certain emission limits within specified time periods from its refinery located in Canton, Ohio. In meeting the following commitments, MAP is released from civil liabilities associated with 40 CFR Part 52.21 and 40 CFR Part 60, Subpart J for process heater and boiler projects which occurred prior to May 11, 2001.

   a. Install nitrogen oxide (NOx) controls on the refinery-wide set of process heaters and boilers in accordance with Paragraph 13 and Appendix C of the Global Settlement Agreement(GSA).

b. Eliminate fuel oil burning and meet the new source performance standard for fuel gas for all process heaters and boilers as outlined in Paragraph 15 and Appendix G of the GSA.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
Process heat exchanger for heating crude oil with a maximum heat input of 193 mmBtu/hr, fired with refinery fuel gas, natural gas and/or landfill gas (designated as 4-0-B-6).	OAC rule 3745-18-82(E)	The SO2 emission limitation specified in OAC rule 3745-18-82(E) is equal to the SO2 emission limitation established in 40 CFR 52.1881(b)(27)(ix).

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

Emissions Unit ID: B015

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a 39 MMBtu/hr. D.O.T. heater designated as 4-2-B-1. The heater burns refinery fuel gas, natural gas and/or landfill gas to generate heat.	40 CFR Part 60.104(a)(1)	See A.I.2.a below.
	40 CFR 52.1881(b)(27)(ix)	0.025 pound of sulfur dioxide (SO2) per mmBtu of actual heat input
	OAC rule 3745-17-10(B)(1)	0.020 pound of particulates per mmBtu 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 3745-31-05(A)(3) (PTI 15-023)	The requirements established pursuant to this rule are equivalent to the requirements of 40 CFR Part 60.104(a)(1), 40 CFR Part 52.1881(b)(27)(ix), OAC rule 3745-17-10(B)(1), and OAC rule 3745-17-07(A).

2. Additional Terms and Conditions

2.a The permittee shall not burn any mixture of refinery fuel gas, natural gas, and/or landfill gas in this emissions unit that contains hydrogen sulfide (H2S) in excess of 230 mg/dscm (0.10 gr/dscf).

II. Operational Restrictions

1. The permittee shall burn only refinery fuel gas, natural gas and/or landfill gas in this emissions unit. Hereinafter, this mixture of fuel gases shall be referred to as “refinery fuel gas”. The sulfur content of the refinery fuel gas burned in this emissions unit shall comply with the allowable SO2 emission limitation specified in section A.I.

2. All refinery fuel gas burned by this emissions unit shall be supplied from the south area fuel drum.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall continuously sample and analyze the refinery fuel gas for sulfur content using the H2S CEMS required in section A.III.2 and maintain records of the analytical results.

2. The permittee shall operate and maintain existing equipment to continuously monitor and record the concentrations of H2S in the refinery fuel gas burned in this emissions unit, in units of ppm. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13. The span value for this instrument shall be 425 mg/dscm of H2S.

3. A statement of certification of the existing H2S 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 Canton City Health Department, Air Pollution Control Division upon request.

4. The permittee shall maintain records of all data obtained by the H2S CEMS including, but not limited to, parts per million (ppm) of H2S, ppm of H2S as a rolling, 3-hour 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 CEMS that is designed to ensure continuous valid and representative readings of H2S. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. Records for the monitoring system must be kept on site and available for inspection during regular office hours.

6. The permittee shall collect samples, at least three times per week, of the refinery fuel gas for gas chromatographic analysis. The permittee shall collect refinery fuel gas samples using procedures that will ensure that sample containers are adequately purged prior to sample collection, thereby, ensuring a representative fuel gas sample. The permittee shall maintain a copy of the sampling procedures on site.

7. 7. The permittee shall maintain daily records of the actual heating value of the refinery fuel gas as burned in this emissions unit. The actual heating value (H), in Btu per scf, of the refinery fuel gas shall be calculated as follows from the results of a daily refinery fuel gas compositional analysis using gas chromatography:

   H = summation of (hi x mi)

   mi = the mass fraction of each chemical compound detected in the refinery fuel gas using chromatographic analysis; and

   hi = the higher heating value of each chemical compound detected in the refinery fuel gas, in Btu per pound of chemical, as found in the GPSA manual.

8. 8. The permittee shall use one of the following methods to conduct the compositional analysis of the refinery fuel gas samples:

   ASTM D1945-96
   ASTM D1945-96 (Wasson Modification)
   GPA Method 2261-90

   When using the Wasson Modification of ASTM Method D1945-96, the permittee shall follow, at a minimum, QA/QC requirements specified in ASTM D1945-96. The permittee shall also operate and maintain the Wasson gas chromatographic instrumentation according to the manufacturer's specifications and recommendations. Alternative, equivalent methods may be used upon written approval by the Canton City Health Department, Air Pollution Control Division.

9. 9. The permittee shall maintain daily records of each calculated, rolling, 3-hour average of the sulfur dioxide emission rate, in pounds per MMBtu, discharged from this emissions unit. The sulfur dioxide emission rate shall be calculated as follows:

   [(Rolling, 3-hour average H2S concentration, in ppmv) x (1 scf H2S/1x10^6 ppmv) x (1 mole H2S/379 scf H2S) x (1 mole S02/mole H2S) x (64 pounds of S02/mole S02)] / (daily recorded heating value of the refinery fuel gas) = sulfur dioxide mass emission rate.

10. For each day during which the permittee burns a fuel other than refinery fuel gas, the permittee shall maintain a record of the type, quantity, sulfur content, in pound of sulfur per mmdscf, and heating value, in Btu/dscf, of the fuel burned.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each rolling, 3-hour average SO2 emission rate, as calculated in section A.III.9, that exceeds the SO2 emission limitation of 0.025 pound of SO2 per mmBtu of actual heat input for the burning of refinery fuel gas.

2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas is burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

3. The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Canton City Health Department, Air Pollution Control Division 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 in the quarterly report.

4. Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit H2S concentration reports within thirty (30) days following the end of each calendar quarter to the Canton City Health Department, Air Pollution Control Division. These reports shall contain the date, commencement and completion times,

and durations of all instances of rolling, 3-hour H2S concentrations in excess of the 0.10 gr/dscf limitation, and the corrective actions taken (if any). If there are no concentrations of H2S in the refinery fuel gas 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.

V. Testing Requirements

1. Compliance with the emission limitations and control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

   0.025 pound of S02 per mmBtu of actual heat input

   Applicable Compliance Method:

   Compliance shall be demonstrated by the record keeping requirements specified in sections A.III.1 and A.III.6 through A.III.9.

   If required, the permittee shall demonstrate compliance with the above SO2 emission limitation in accordance with the procedures and methods specified in 40 CFR Part 60, Appendix A, Method 6 or one of its approved modifications and OAC rule 3745-18-04.

   b. Emission Limitation:

   0.020 pound of particulates per mmBtu of actual heat input

   Applicable Compliance Method:

   If required, the permittee shall demonstrate compliance with the above particulate emission limitation in accordance with the procedures and methods specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and OAC rule 3745-17-03(B)(10).

   c. Emission Limitation:

   20% opacity as a 6-minute average, except as provided by rule

   Applicable Compliance Method:

   If required, compliance shall be demonstrated based upon the requirements in OAC rule 3745-17-03(B)(1) and the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

   d. Emission Limitation:

   0.10 gr/dscf of H2S

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.12. If required, the permittee shall demonstrate compliance with the above H2S emission limitation in accordance with the methods and procedures specified in 40 CFR Part 60, Method 11.

2. The permittee shall perform on-going quality assurance tests for the H2S CEMS as required in section A.III.5 in accordance with the procedures specified in 40 CFR Part 60, Appendix F.

3. The permittee shall conduct annual H2S concentration testing of the refinery fuel gas from the south area fuel drum as required by 40 CFR Part 60.13(c) and section A.III.5 to verify H2S CEMS performance in accordance with the following requirements:

   a. The emissions testing shall be conducted using 40 CFR Part 60, Appendix A, Method 11 for the purpose of conducting relative accuracy evaluations.

   b. The test shall be conducted while the emissions units associated with the south area fuel drum are operating at greater than 50% of normal load.

   Not later than 30 days prior to the proposed test date(s), the permittee shall submit an Intent to Test (ITT) Notification to the Canton City Health Department, Air Pollution Control Division. The ITT Notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests and the persons who will be conducting the tests. Failure to submit such notification for review and approval prior to the test may result in the refusal to accept the ITT.

   Personnel from the Canton City Health Department, Air Pollution Control Division shall be permitted to witness the tests, 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 shall be signed by the person or persons responsible for the tests and submitted to the Canton City Health Department, Air Pollution Control Division within 30 days following completion of the tests.

VI. Miscellaneous Requirements

1. On August 28, 2001, Marathon Ashland Petroleum, LLC (MAP) and the United States of America entered into a global settlement agreement(Civil NO. 01-40119) entailing several air quality regulations. As part of the settlement, MAP agreed to achieve certain emission limits within specified time periods from its refinery located in Canton, Ohio. In meeting the following commitments, MAP is released from civil liabilities associated with 40 CFR Part 52.21 and 40 CFR Part 60, Subpart J for process heater and boiler projects which occurred prior to May 11, 2001.

   a. Install nitrogen oxide (NOx) controls on the refinery-wide set of process heaters and boilers in accordance with Paragraph 13 and Appendix C of the Global Settlement Agreement(GSA).

b. Eliminate fuel oil burning and meet the new source performance standard for fuel gas for all process heaters and boilers as outlined in Paragraph 15 and Appendix G of the GSA.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a 39 MMBtu/hr. D.O.T. heater designated as 4-2-B-1. The heater burns refinery fuel gas, natural gas and/or landfill gas to generate heat.	OAC rule 3745-18-82(E)	The SO2 emission limitation specified in OAC rule 3745-18-82(E) is equal to the SO2 emission limitation established in 40 CFR 52.1881(b)(27)(ix).

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is the FCC charge heater with a maximum heat input of 51 MMBtu/hr. It is fired with refinery fuel gas, natural gas and/or landfill gas. It is designated as 4-2-B-5/6.	40 CFR Part 60.104(a)(1)	See A.I.2.a below.
	40 CFR 52.1881(b)(27)(ix)	0.025 pound of sulfur dioxide (SO2) per mmBtu of actual heat input
	OAC rule 3745-17-10(B)(1)	0.020 pound of particulates per mmBtu 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 3745-31-05(A)(3) (PTI 15-023)	The requirements established pursuant to this rule are equivalent to the requirements of 40 CFR Part 60.104(a)(1), 40 CFR Part 52.1881(b)(27)(ix), OAC rule 3745-17-10(B)(1), and OAC rule 3745-17-07(A).

2. Additional Terms and Conditions

2.a The permittee shall not burn any mixture of refinery fuel gas, natural gas and/or landfill gas in this emissions unit that contains hydrogen sulfide (H2S) in excess of 230 mg/dscm (0.10 gr/dscf).

II. Operational Restrictions

1. The permittee shall burn only refinery fuel gas, natural gas and/or landfill gas in this emissions unit. Hereinafter, this mixture of fuel gases shall be referred to as “refinery fuel gas”. The sulfur content of the refinery fuel gas burned in this emissions unit shall comply with the allowable SO2 emission limitation specified in section A.I.

2. All refinery fuel gas burned by this emissions unit shall be supplied from the south area fuel drum.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall continuously sample and analyze the refinery fuel gas for sulfur content using the H2S CEMS required in section A.III.2 and maintain records of the analytical results.

2. The permittee shall operate and maintain existing equipment to continuously monitor and record the concentrations of H2S in the refinery fuel gas burned in this emissions unit, in units of ppm. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13. The span value for this instrument shall be 425 mg/dscm of H2S.

3. A statement of certification of the existing H2S 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 Canton City Health Department, Air Pollution Control Division upon request.

4. The permittee shall maintain records of all data obtained by the H2S CEMS including, but not limited to, parts per million (ppm) of H2S, ppm of H2S as a rolling, 3-hour 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 CEMS that is designed to ensure continuous valid and representative readings of H2S. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. Records for the monitoring system must be kept on site and available for inspection during regular office hours.

6. The permittee shall collect samples, at least three times per week, of the refinery fuel gas for gas chromatographic analysis. The permittee shall collect refinery fuel gas samples using procedures that will ensure that sample containers are adequately purged prior to sample collection, thereby, ensuring a representative fuel gas sample. The permittee shall maintain a copy of the sampling procedures on site.

7. 7. The permittee shall maintain daily records of the actual heating value of the refinery fuel gas as burned in this emissions unit. The actual heating value (H), in Btu per scf, of the refinery fuel gas shall be calculated as follows from the results of a daily refinery fuel gas compositional analysis using gas chromatography:

   H = summation of (hi x mi)

   mi = the mass fraction of each chemical compound detected in the refinery fuel gas using chromatographic analysis; and

   hi = the higher heating value of each chemical compound detected in the refinery fuel gas, in Btu per pound of chemical, as found in the GPSA manual.

8. 8. The permittee shall use one of the following methods to conduct the compositional analysis of the refinery fuel gas samples:

   ASTM D1945-96
   ASTM D1945-96 (Wasson Modification)
   GPA Method 2261-90

   When using the Wasson Modification of ASTM Method D1945-96, the permittee shall follow, at a minimum, QA/QC requirements specified in ASTM D1945-96. The permittee shall also operate and maintain the Wasson gas chromatographic instrumentation according to the manufacturer's specifications and recommendations. Alternative, equivalent methods may be used upon written approval by the Canton City Health Department, Air Pollution Control Division.

9. 9. The permittee shall maintain daily records of each calculated, rolling, 3-hour average of the sulfur dioxide emission rate, in pounds per MMBtu, discharged from this emissions unit. The sulfur dioxide emission rate shall be calculated as follows:

   [(Rolling, 3-hour average H2S concentration, in ppmv) x (1 scf H2S/1x10^6 ppmv) x (1 mole H2S/379 scf H2S) x (1 mole S02/mole H2S) x (64 pounds of S02/mole S02)] / (daily recorded heating value of the refinery fuel gas) = sulfur dioxide mass emission rate.

10. For each day during which the permittee burns a fuel other than refinery fuel gas, the permittee shall maintain a record of the type, quantity, sulfur content, in pound of sulfur per mmdscf, and heating value, in Btu/dscf, of the fuel burned.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each rolling, 3-hour average SO2 emission rate, as calculated in section A.III.9, that exceeds the SO2 emission limitation of 0.025 pound of SO2 per mmBtu of actual heat input for the burning of refinery fuel gas.

2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas is burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

3. The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Canton City Health Department, Air Pollution Control Division 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 in the quarterly report.

4. Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit H2S concentration reports within thirty (30) days following the end of each calendar quarter to the Canton City Health Department, Air Pollution Control Division. These reports shall contain the date, commencement and completion times,

and durations of all instances of rolling, 3-hour H2S concentrations in excess of the 0.10 gr/dscf limitation, and the corrective actions taken (if any). If there are no concentrations of H2S in the refinery fuel gas 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.

V. Testing Requirements

1. Compliance with the emission limitations and control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

0.025 pound of S02 per mmBtu of actual heat input

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in sections A.III.1 and A.III.6 through A.III.9.

If required, the permittee shall demonstrate compliance with the above SO2 emission limitation in accordance with the procedures and methods specified in 40 CFR Part 60, Appendix A, Method 6 or one of its approved modifications and OAC rule 3745-18-04.

b. Emission Limitation:

0.020 pound of particulates per mmBtu of actual heat input

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the above particulate emission limitation in accordance with the procedures and methods specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and OAC rule 3745-17-03(B)(10).

c. Emission Limitation:

20% opacity as a 6-minute average, except as provided by rule

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the requirements in OAC rule 3745-17-03(B)(1) and the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

d. Emission Limitation:

0.10 gr/dscf of H2S

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.12. If required, the permittee shall demonstrate compliance with the above H2S emission limitation in accordance with the methods and procedures specified in 40 CFR Part 60, Method 11.

2. The permittee shall perform on-going quality assurance tests for the H2S CEMS as required in section A.III.5 in accordance with the procedures specified in 40 CFR Part 60, Appendix F.

3. The permittee shall conduct annual H2S concentration testing of the refinery fuel gas from the south area fuel drum as required by 40 CFR Part 60.13(c) and section A.III.5 to verify H2S CEMS performance in accordance with the following requirements:

   a. The emissions testing shall be conducted using 40 CFR Part 60, Appendix A, Method 11 for the purpose of conducting relative accuracy evaluations.

   b. The test shall be conducted while the emissions units associated with the south area fuel drum are operating at greater than 50% of normal load.

   Not later than 30 days prior to the proposed test date(s), the permittee shall submit an Intent to Test (ITT) Notification to the Canton City Health Department, Air Pollution Control Division. The ITT Notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests and the persons who will be conducting the tests. Failure to submit such notification for review and approval prior to the test may result in the refusal to accept the ITT.

   Personnel from the Canton City Health Department, Air Pollution Control Division shall be permitted to witness the tests, 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 shall be signed by the person or persons responsible for the tests and submitted to the Canton City Health Department, Air Pollution Control Division within 30 days following completion of the tests.

VI. Miscellaneous Requirements

1. On August 28, 2001, Marathon Ashland Petroleum, LLC (MAP) and the United States of America entered into a global settlement agreement(Civil NO. 01-40119) entailing several air quality regulations. As part of the settlement, MAP agreed to achieve certain emission limits within specified time periods from its refinery located in Canton, Ohio. In meeting the following commitments, MAP is released from civil liabilities associated with 40 CFR Part 52.21 and 40 CFR Part 60, Subpart J for process heater and boiler projects which occurred prior to May 11, 2001.

   a. Install nitrogen oxide (NOx) controls on the refinery-wide set of process heaters and boilers in accordance with Paragraph 13 and Appendix C of the Global Settlement Agreement(GSA).

b. Eliminate fuel oil burning and meet the new source performance standard for fuel gas for all process heaters and boilers as outlined in Paragraph 15 and Appendix G of the GSA.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is the FCC charge heater with a maximum heat input of 51 MMBtu/hr. It is fired with refinery fuel gas, natural gas and/or landfill gas. It is designated as 4-2-B-5/6.	OAC rule 3745-18-82(E)	The SO2 emission limitation specified in OAC rule 3745-18-82(E) is equal to the SO2 emission limitation established in 40 CFR 52.1881(b)(27)(ix).

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

Emissions Unit ID: B019

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a vacuum heater with a maximum heat input of 64 MMBtu/hr. It is fired with refinery fuel gas, natural gas and/or landfill gas. It is designated as 4-4-B-1.	40 CFR Part 60.104(a)(1)	See A.I.2.a below.
	40 CFR 52.1881(b)(27)(ix)	0.025 pound of sulfur dioxide (SO2) per mmBtu of actual heat input
	OAC rule 3745-17-10(B)(1)	0.020 pound of particulates per mmBtu 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 3745-31-05(A)(3) (PTI 15-023)	The requirements established pursuant to this rule are equivalent to the requirements of 40 CFR Part 60.104(a)(1), 40 CFR Part 52.1881(b)(27)(ix), OAC rule 3745-17-10(B)(1), and OAC rule 3745-17-07(A).

2. Additional Terms and Conditions

2.a The permittee shall not burn any mixture of refinery fuel gas, natural gas and/or landfill gas in this emissions unit that contains hydrogen sulfide (H2S) in excess of 230 mg/dscm (0.10 gr/dscf).

II. Operational Restrictions

1. The permittee shall burn only refinery fuel gas, natural gas and/or landfill gas in this emissions unit. Hereinafter, this mixture of fuel gases shall be referred to as “refinery fuel gas”. The sulfur content of the refinery fuel gas burned in this emissions unit shall comply with the allowable SO2 emission limitation specified in section A.I.

2. All refinery fuel gas burned by this emissions unit shall be supplied from the south area fuel drum.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall continuously sample and analyze the refinery fuel gas for sulfur content using the H2S CEMS required in section A.III.2 and maintain records of the analytical results.

2. The permittee shall operate and maintain existing equipment to continuously monitor and record the concentrations of H2S in the refinery fuel gas burned in this emissions unit, in units of ppm. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13. The span value for this instrument shall be 425 mg/dscm of H2S.

3. A statement of certification of the existing H2S 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 Canton City Health Department, Air Pollution Control Division upon request.

4. The permittee shall maintain records of all data obtained by the H2S CEMS including, but not limited to, parts per million (ppm) of H2S, ppm of H2S as a rolling, 3-hour 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 CEMS that is designed to ensure continuous valid and representative readings of H2S. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. Records for the monitoring system must be kept on site and available for inspection during regular office hours.

6. The permittee shall collect samples, at least three times per week, of the refinery fuel gas for gas chromatographic analysis. The permittee shall collect refinery fuel gas samples using procedures that will ensure that sample containers are adequately purged prior to sample collection, thereby, ensuring a representative fuel gas sample. The permittee shall maintain a copy of the sampling procedures on site.

7. 7. The permittee shall maintain daily records of the actual heating value of the refinery fuel gas as burned in this emissions unit. The actual heating value (H), in Btu per scf, of the refinery fuel gas shall be calculated as follows from the results of a daily refinery fuel gas compositional analysis using gas chromatography:

   H = summation of (hi x mi)

   mi = the mass fraction of each chemical compound detected in the refinery fuel gas using chromatographic analysis; and

   hi = the higher heating value of each chemical compound detected in the refinery fuel gas, in Btu per pound of chemical, as found in the GPSA manual.

8. 8. The permittee shall use one of the following methods to conduct the compositional analysis of the refinery fuel gas samples:

   ASTM D1945-96
   ASTM D1945-96 (Wasson Modification)
   GPA Method 2261-90

   When using the Wasson Modification of ASTM Method D1945-96, the permittee shall follow, at a minimum, QA/QC requirements specified in ASTM D1945-96. The permittee shall also operate and maintain the Wasson gas chromatographic instrumentation according to the manufacturer's specifications and recommendations. Alternative, equivalent methods may be used upon written approval by the Canton City Health Department, Air Pollution Control Division.

9. 9. The permittee shall maintain daily records of each calculated, rolling, 3-hour average of the sulfur dioxide emission rate, in pounds per MMBtu, discharged from this emissions unit. The sulfur dioxide emission rate shall be calculated as follows:

   [(Rolling, 3-hour average H2S concentration, in ppmv) x (1 scf H2S/1x10^6 ppmv) x (1 mole H2S/379 scf H2S) x (1 mole S02/mole H2S) x (64 pounds of S02/mole S02)] / (daily recorded heating value of the refinery fuel gas) = sulfur dioxide mass emission rate.

10. For each day during which the permittee burns a fuel other than refinery fuel gas, the permittee shall maintain a record of the type, quantity, sulfur content, in pound of sulfur per mmdscf, and heating value, in Btu/dscf, of the fuel burned.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each rolling, 3-hour average SO2 emission rate, as calculated in section A.III.9, that exceeds the SO2 emission limitation of 0.025 pound of SO2 per mmBtu of actual heat input for the burning of refinery fuel gas.

2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas is burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

3. The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Canton City Health Department, Air Pollution Control Division 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 in the quarterly report.

4. Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit H2S concentration reports within thirty (30) days following the end of each calendar quarter to the Canton City Health Department, Air Pollution Control Division. These reports shall contain the date, commencement and completion times,

and durations of all instances of rolling, 3-hour H2S concentrations in excess of the 0.10 gr/dscf limitation, and the corrective actions taken (if any). If there are no concentrations of H2S in the refinery fuel gas 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.

V. Testing Requirements

1. Compliance with the emission limitations and control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

   0.025 pound of S02 per mmBtu of actual heat input

   Applicable Compliance Method:

   Compliance shall be demonstrated by the record keeping requirements specified in sections A.III.1 and A.III.6 through A.III.9.

   If required, the permittee shall demonstrate compliance with the above SO2 emission limitation in accordance with the procedures and methods specified in 40 CFR Part 60, Appendix A, Method 6 or one of its approved modifications and OAC rule 3745-18-04.

   b. Emission Limitation:

   0.020 pound of particulates per mmBtu of actual heat input

   Applicable Compliance Method:

   If required, the permittee shall demonstrate compliance with the above particulate emission limitation in accordance with the procedures and methods specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and OAC rule 3745-17-03(B)(10).

   c. Emission Limitation:

   20% opacity as a 6-minute average, except as provided by rule

   Applicable Compliance Method:

   If required, compliance shall be demonstrated based upon the requirements in OAC rule 3745-17-03(B)(1) and the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

   d. Emission Limitation:

   0.10 gr/dscf of H2S

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.12. If required, the permittee shall demonstrate compliance with the above H2S emission limitation in accordance with the methods and procedures specified in 40 CFR Part 60, Method 11.

2. The permittee shall perform on-going quality assurance tests for the H2S CEMS as required in section A.III.5 in accordance with the procedures specified in 40 CFR Part 60, Appendix F.

3. The permittee shall conduct annual H2S concentration testing of the refinery fuel gas from the south area fuel drum as required by 40 CFR Part 60.13(c) and section A.III.5 to verify H2S CEMS performance in accordance with the following requirements:

   a. The emissions testing shall be conducted using 40 CFR Part 60, Appendix A, Method 11 for the purpose of conducting relative accuracy evaluations.

   b. The test shall be conducted while the emissions units associated with the south area fuel drum are operating at greater than 50% of normal load.

   Not later than 30 days prior to the proposed test date(s), the permittee shall submit an Intent to Test (ITT) Notification to the Canton City Health Department, Air Pollution Control Division. The ITT Notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests and the persons who will be conducting the tests. Failure to submit such notification for review and approval prior to the test may result in the refusal to accept the ITT.

   Personnel from the Canton City Health Department, Air Pollution Control Division shall be permitted to witness the tests, 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 shall be signed by the person or persons responsible for the tests and submitted to the Canton City Health Department, Air Pollution Control Division within 30 days following completion of the tests.

VI. Miscellaneous Requirements

1. On August 28, 2001, Marathon Ashland Petroleum, LLC (MAP) and the United States of America entered into a global settlement agreement(Civil NO. 01-40119) entailing several air quality regulations. As part of the settlement, MAP agreed to achieve certain emission limits within specified time periods from its refinery located in Canton, Ohio. In meeting the following commitments, MAP is released from civil liabilities associated with 40 CFR Part 52.21 and 40 CFR Part 60, Subpart J for process heater and boiler projects which occurred prior to May 11, 2001.

   a. Install nitrogen oxide (NOx) controls on the refinery-wide set of process heaters and boilers in accordance with Paragraph 13 and Appendix C of the Global Settlement Agreement(GSA).

b. Eliminate fuel oil burning and meet the new source performance standard for fuel gas for all process heaters and boilers as outlined in Paragraph 15 and Appendix G of the GSA.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a vacuum heater with a maximum heat input of 64 MMBtu/hr. It is fired with refinery fuel gas, natural gas and/or landfill gas. It is designated as 4-4-B-1.	OAC rule 3745-18-82(E)	The SO2 emission limitation specified in OAC rule 3745-18-82(E) is equal to the SO2 emission limitation established in 40 CFR 52.1881(b)(27)(ix).

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

Emissions Unit ID: B020

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a process heater for the ISO-stripper. It has a maximum heat input of 50 mmBtu/hr. The unit is fired with refinery fuel gas, natural gas and/or landfill gas and is designated as 4-27-B-1.	40 CFR Part 60.104(a)(1)	See A.I.2.a below.
	40 CFR 52.1881(b)(27)(ix)	0.025 pound of sulfur dioxide (SO2) per mmBtu of actual heat input
	OAC rule 3745-17-10(B)(1)	0.020 pound of particulates per mmBtu 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 3745-31-05(A)(3) (PTI 15-023)	The requirements established pursuant to this rule are equivalent to the requirements of 40 CFR Part 60.104(a)(1), 40 CFR Part 52.1881(b)(27)(ix), OAC rule 3745-17-10(B)(1), and OAC rule 3745-17-07(A).

2. Additional Terms and Conditions

2.a The permittee shall not burn any mixture of refinery fuel gas, natural gas and/or landfill gas in this emissions unit that contains hydrogen sulfide (H2S) in excess of 230 mg/dscm (0.10 gr/dscf).

II. Operational Restrictions

1. The permittee shall burn only refinery fuel gas, natural gas and/or landfill gas in this emissions unit. Hereinafter, this mixture of fuel gases shall be referred to as “refinery fuel gas”. The sulfur content of the refinery fuel gas burned in this emissions unit shall comply with the allowable SO2 emission limitation specified in section A.I.

2. All refinery fuel gas burned by this emissions unit shall be supplied from the south area fuel drum.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall continuously sample and analyze the refinery fuel gas for sulfur content using the H2S CEMS required in section A.III.2 and maintain records of the analytical results.

2. The permittee shall operate and maintain existing equipment to continuously monitor and record the concentrations of H2S in the refinery fuel gas burned in this emissions unit, in units of ppm. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13. The span value for this instrument shall be 425 mg/dscm of H2S.

3. A statement of certification of the existing H2S 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 Canton City Health Department, Air Pollution Control Division upon request.

4. The permittee shall maintain records of all data obtained by the H2S CEMS including, but not limited to, parts per million (ppm) of H2S, ppm of H2S as a rolling, 3-hour 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 CEMS that is designed to ensure continuous valid and representative readings of H2S. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. Records for the monitoring system must be kept on site and available for inspection during regular office hours.

6. The permittee shall collect samples, at least three times per week, of the refinery fuel gas for gas chromatographic analysis. The permittee shall collect refinery fuel gas samples using procedures that will ensure that sample containers are adequately purged prior to sample collection, thereby, ensuring a representative fuel gas sample. The permittee shall maintain a copy of the sampling procedures on site.

7. 7. The permittee shall maintain daily records of the actual heating value of the refinery fuel gas as burned in this emissions unit. The actual heating value (H), in Btu per scf, of the refinery fuel gas shall be calculated as follows from the results of a daily refinery fuel gas compositional analysis using gas chromatography:

   H = summation of (hi x mi)

   mi = the mass fraction of each chemical compound detected in the refinery fuel gas using chromatographic analysis; and

   hi = the higher heating value of each chemical compound detected in the refinery fuel gas, in Btu per pound of chemical, as found in the GPSA manual.

8. 8. The permittee shall use one of the following methods to conduct the compositional analysis of the refinery fuel gas samples:

   ASTM D1945-96
   ASTM D1945-96 (Wasson Modification)
   GPA Method 2261-90

   When using the Wasson Modification of ASTM Method D1945-96, the permittee shall follow, at a minimum, QA/QC requirements specified in ASTM D1945-96. The permittee shall also operate and maintain the Wasson gas chromatographic instrumentation according to the manufacturer's specifications and recommendations. Alternative, equivalent methods may be used upon written approval by the Canton City Health Department, Air Pollution Control Division.

9. 9. The permittee shall maintain daily records of each calculated, rolling, 3-hour average of the sulfur dioxide emission rate, in pounds per MMBtu, discharged from this emissions unit. The sulfur dioxide emission rate shall be calculated as follows:

   [(Rolling, 3-hour average H2S concentration, in ppmv) x (1 scf H2S/1x10^6 ppmv) x (1 mole H2S/379 scf H2S) x (1 mole S02/mole H2S) x (64 pounds of S02/mole S02)] / (daily recorded heating value of the refinery fuel gas) = sulfur dioxide mass emission rate.

10. For each day during which the permittee burns a fuel other than refinery fuel gas, the permittee shall maintain a record of the type, quantity, sulfur content, in pound of sulfur per mmdscf, and heating value, in Btu/dscf, of the fuel burned.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each rolling, 3-hour average SO2 emission rate, as calculated in section A.III.9, that exceeds the SO2 emission limitation of 0.025 pound of SO2 per mmBtu of actual heat input for the burning of refinery fuel gas.

2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas is burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

3. The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Canton City Health Department, Air Pollution Control Division 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 in the quarterly report.

4. Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit H2S concentration reports within thirty (30) days following the end of each calendar quarter to the Canton City Health Department, Air Pollution Control Division. These reports shall contain the date, commencement and completion times,

and durations of all instances of rolling, 3-hour H2S concentrations in excess of the 0.10 gr/dscf limitation, and the corrective actions taken (if any). If there are no concentrations of H2S in the refinery fuel gas 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.

V. Testing Requirements

1. Compliance with the emission limitations and control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

   0.025 pound of S02 per mmBtu of actual heat input

   Applicable Compliance Method:

   Compliance shall be demonstrated by the record keeping requirements specified in sections A.III.1 and A.III.6 through A.III.9.

   If required, the permittee shall demonstrate compliance with the above SO2 emission limitation in accordance with the procedures and methods specified in 40 CFR Part 60, Appendix A, Method 6 or one of its approved modifications and OAC rule 3745-18-04.

   b. Emission Limitation:

   0.020 pound of particulates per mmBtu of actual heat input

   Applicable Compliance Method:

   If required, the permittee shall demonstrate compliance with the above particulate emission limitation in accordance with the procedures and methods specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and OAC rule 3745-17-03(B)(10).

   c. Emission Limitation:

   20% opacity as a 6-minute average, except as provided by rule

   Applicable Compliance Method:

   If required, compliance shall be demonstrated based upon the requirements in OAC rule 3745-17-03(B)(1) and the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

   d. Emission Limitation:

   0.10 gr/dscf of H2S

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.12. If required, the permittee shall demonstrate compliance with the above H2S emission limitation in accordance with the methods and procedures specified in 40 CFR Part 60, Method 11.

2. The permittee shall perform on-going quality assurance tests for the H2S CEMS as required in section A.III.5 in accordance with the procedures specified in 40 CFR Part 60, Appendix F.

3. The permittee shall conduct annual H2S concentration testing of the refinery fuel gas from the south area fuel drum as required by 40 CFR Part 60.13(c) and section A.III.5 to verify H2S CEMS performance in accordance with the following requirements:

   a. The emissions testing shall be conducted using 40 CFR Part 60, Appendix A, Method 11 for the purpose of conducting relative accuracy evaluations.

   b. The test shall be conducted while the emissions units associated with the south area fuel drum are operating at greater than 50% of normal load.

   Not later than 30 days prior to the proposed test date(s), the permittee shall submit an Intent to Test (ITT) Notification to the Canton City Health Department, Air Pollution Control Division. The ITT Notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests and the persons who will be conducting the tests. Failure to submit such notification for review and approval prior to the test may result in the refusal to accept the ITT.

   Personnel from the Canton City Health Department, Air Pollution Control Division shall be permitted to witness the tests, 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 shall be signed by the person or persons responsible for the tests and submitted to the Canton City Health Department, Air Pollution Control Division within 30 days following completion of the tests.

VI. Miscellaneous Requirements

1. On August 28, 2001, Marathon Ashland Petroleum, LLC (MAP) and the United States of America entered into a global settlement agreement(Civil NO. 01-40119) entailing several air quality regulations. As part of the settlement, MAP agreed to achieve certain emission limits within specified time periods from its refinery located in Canton, Ohio. In meeting the following commitments, MAP is released from civil liabilities associated with 40 CFR Part 52.21 and 40 CFR Part 60, Subpart J for process heater and boiler projects which occurred prior to May 11, 2001.

   a. Install nitrogen oxide (NOx) controls on the refinery-wide set of process heaters and boilers in accordance with Paragraph 13 and Appendix C of the Global Settlement Agreement(GSA).

b. Eliminate fuel oil burning and meet the new source performance standard for fuel gas for all process heaters and boilers as outlined in Paragraph 15 and Appendix G of the GSA.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a process heater for the ISO-stripper. It has a maximum heat input of 50 mmBtu/hr. The unit is fired with refinery fuel gas, natural gas and/or landfill gas and is designated as 4-27-B-1.	OAC rule 3745-18-82(E)	The SO2 emission limitation specified in OAC rule 3745-18-82(E) is equal to the SO2 emission limitation established in 40 CFR 52.1881(b)(27)(ix).

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

Emissions Unit ID: B021

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is an HDS charge heater with a maximum heat input of 94 MMBtu/hr. It is fired with refinery fuel gas, natural gas and/or landfill gas. This unit is designated as 4-32-B-1.	40 CFR Part 60.104(a)(1)	See section A.I.2.a
	40 CFR 52.1881(b)(27)(ix)	0.025 pound of sulfur dioxide (SO2) per mmBtu of actual heat input
	OAC rule 3745-17-10(B)(1)	0.020 pound of particulates per mmBtu 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 3745-31-05(A)(3) (PTI 15-023)	The requirements established pursuant to this rule are equivalent to the requirements of 40 CFR Part 60.104(a)(1), 40 CFR Part 52.1881(b)(27)(ix), OAC rule 3745-17-10(B)(1), and OAC rule 3745-17-07(A).

2. Additional Terms and Conditions

2.a The permittee shall not burn any mixture of refinery fuel gas, natural gas and/or landfill gas in this emissions unit that contains hydrogen sulfide (H2S) in excess of 230 mg/dscm (0.10 gr/dscf).

II. Operational Restrictions

1. The permittee shall burn only a mixture of refinery fuel gas, natural gas and/or landfill gas in this emissions unit. Hereinafter, this mixture of fuel gases shall be referred to as “refinery fuel gas”. The sulfur content of the refinery fuel gas burned in this emissions unit shall comply with the allowable SO2 emission limitation specified in section A.I.

2. All refinery fuel gas burned by this emissions unit shall be supplied from the south area fuel drum.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall continuously sample and analyze the refinery fuel gas for sulfur content using the H2S CEMS required in section A.III.2 and maintain records of the analytical results.

2. The permittee shall operate and maintain existing equipment to continuously monitor and record the concentrations of H2S in the refinery fuel gas burned in this emissions unit, in units of ppm. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13. The span value for this instrument shall be 425 mg/dscm of H2S.

3. A statement of certification of the existing H2S 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 Canton City Health Department, Air Pollution Control Division upon request.

4. The permittee shall maintain records of all data obtained by the H2S CEMS including, but not limited to, parts per million (ppm) of H2S, ppm of H2S as a rolling, 3-hour 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 CEMS that is designed to ensure continuous valid and representative readings of H2S. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. Records for the monitoring system must be kept on site and available for inspection during regular office hours.

6. The permittee shall collect samples, at least three times per week, of the refinery fuel gas for gas chromatographic analysis. The permittee shall collect refinery fuel gas samples using procedures that will ensure that sample containers are adequately purged prior to sample collection, thereby, ensuring a representative fuel gas sample. The permittee shall maintain a copy of the sampling procedures on site.

7. 7. The permittee shall maintain daily records of the actual heating value of the refinery fuel gas as burned in this emissions unit. The actual heating value (H), in Btu per scf, of the refinery fuel gas shall be calculated as follows from the results of a daily refinery fuel gas compositional analysis using gas chromatography:

   H = summation of (hi x mi)

   mi = the mass fraction of each chemical compound detected in the refinery fuel gas using chromatographic analysis; and

   hi = the higher heating value of each chemical compound detected in the refinery fuel gas, in Btu per pound of chemical, as found in the GPSA manual.

8. 8. The permittee shall use one of the following methods to conduct the compositional analysis of the refinery fuel gas samples:

   ASTM D1945-96
   ASTM D1945-96 (Wasson Modification)
   GPA Method 2261-90

   When using the Wasson Modification of ASTM Method D1945-96, the permittee shall follow, at a minimum, QA/QC requirements specified in ASTM D1945-96. The permittee shall also operate and maintain the Wasson gas chromatographic instrumentation according to the manufacturer's specifications and recommendations. Alternative, equivalent methods may be used upon written approval by the Canton City Health Department, Air Pollution Control Division.

9. 9. The permittee shall maintain daily records of each calculated, rolling, 3-hour average of the sulfur dioxide emission rate, in pounds per MMBtu, discharged from this emissions unit. The sulfur dioxide emission rate shall be calculated as follows:

   [(Rolling, 3-hour average H2S concentration, in ppmv) x (1 scf H2S/1x10^6 ppmv) x (1 mole H2S/379 scf H2S) x (1 mole S02/mole H2S) x (64 pounds of S02/mole S02)] / (daily recorded heating value of the refinery fuel gas) = sulfur dioxide mass emission rate.

10. For each day during which the permittee burns a fuel other than refinery fuel gas, the permittee shall maintain a record of the type, quantity, sulfur content, in pound of sulfur per mmdscf, and heating value, in Btu/dscf, of the fuel burned.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each rolling, 3-hour average SO2 emission rate, as calculated in section A.III.9, that exceeds the SO2 emission limitation of 0.025 pound of SO2 per mmBtu of actual heat input for the burning of refinery fuel gas.

2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas is burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

3. The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Canton City Health Department, Air Pollution Control Division 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 in the quarterly report.

4. Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit H2S concentration reports within thirty (30) days following the end of each calendar quarter to the Canton City Health Department, Air

Pollution Control Division. These reports shall contain the date, commencement and completion times, and durations of all instances of rolling, 3-hour H2S concentrations in excess of the 0.10 gr/dscf limitation, and the corrective actions taken (if any). If there are no concentrations of H2S in the refinery fuel gas 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.

V. Testing Requirements

1. Compliance with the emission limitations and control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emissions Limitation:

   0.025 pound of S02 per mmBtu of actual heat input

   Applicable Compliance Method:

   Compliance shall be demonstrated by the record keeping requirements specified in sections A.III.1 and A.III.6 through A.III.9.

   If required, the permittee shall demonstrate compliance with the above SO2 emission limitation in accordance with the procedures and methods specified in 40 CFR Part 60, Appendix A, Method 6 or one of its approved modifications and OAC rule 3745-18-04.

   b. Emission Limitation:

   0.020 pound of particulates per mmBtu of actual heat input

   Applicable Compliance Method:

   If required, the permittee shall demonstrate compliance with the above particulate emission limitation in accordance with the procedures and methods specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and OAC rule 3745-17-03(B)(10).

   c. Emission Limitation:

   20% opacity as a 6-minute average, except as provided by rule

   Applicable Compliance Method:

   If required, compliance shall be demonstrated based upon the requirements in OAC rule 3745-17-03(B)(1) and the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

   d. Emission Limitation:

   0.10 gr/dscf of H2S

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.12. If required, the permittee shall demonstrate compliance with the above H2S emission limitation in accordance with the methods and procedures specified in 40 CFR Part 60, Method 11.

2. The permittee shall perform on-going quality assurance tests for the H2S CEMS as required in section A.III.5 in accordance with the procedures specified in 40 CFR Part 60, Appendix F.

3. The permittee shall conduct annual H2S concentration testing of the refinery fuel gas from the south area fuel drum as required by 40 CFR Part 60.13(c) and section A.III.5 to verify H2S CEMS performance in accordance with the following requirements:

   a. The emissions testing shall be conducted using 40 CFR Part 60, Appendix A, Method 11 for the purpose of conducting relative accuracy evaluations.

   b. The test shall be conducted while the emissions units associated with the south area fuel drum are operating at greater than 50% of normal load.

   Not later than 30 days prior to the proposed test date(s), the permittee shall submit an Intent to Test (ITT) Notification to the Canton City Health Department, Air Pollution Control Division. The ITT Notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests and the persons who will be conducting the tests. Failure to submit such notification for review and approval prior to the test may result in the refusal to accept the ITT.

   Personnel from the Canton City Health Department, Air Pollution Control Division shall be permitted to witness the tests, 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 shall be signed by the person or persons responsible for the tests and submitted to the Canton City Health Department, Air Pollution Control Division within 30 days following completion of the tests.

VI. Miscellaneous Requirements

1. On August 28, 2001, Marathon Ashland Petroleum, LLC (MAP) and the United States of America entered into a global settlement agreement(Civil NO. 01-40119) entailing several air quality regulations. As part of the settlement, MAP agreed to achieve certain emission limits within specified time periods from its refinery located in Canton, Ohio. In meeting the following commitments, MAP is released from civil liabilities associated with 40 CFR Part 52.21 and 40 CFR Part 60, Subpart J for process heater and boiler projects which occurred prior to May 11, 2001.

   a. Install nitrogen oxide (NOx) controls on the refinery-wide set of process heaters and boilers in accordance with Paragraph 13 and Appendix C of the Global Settlement Agreement(GSA).

b. Eliminate fuel oil burning and meet the new source performance standard for fuel gas for all process heaters and boilers as outlined in Paragraph 15 and Appendix G of the GSA.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is an HDS charge heater with a maximum heat input of 94 MMBtu/hr. It is fired with refinery fuel gas, natural gas and/or landfill gas. This unit is designated as 4-32-B-1.	OAC rule 3745-18-82(E)	The SO2 emission limitation specified in OAC rule 3745-18-82(E) is equal to the SO2 emission limitation established in 40 CFR 52.1881(b)(27)(ix).

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

Emissions Unit ID: B022

None

Emissions Unit ID: B023

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is an NPT heater with a maximum heat input of 83 mmBtu/hr. It is fired with refinery fuel gas, natural gas and/or landfill gas. It is designated as 4-30-B-1.	40 CFR Part 60.104(a)(1)	See A.I.2.a below.
	40 CFR 52.1881(b)(27)(ix)	0.025 pound of sulfur dioxide (SO2) per mmBtu of actual heat input
	OAC rule 3745-17-10(B)(1)	0.020 pound of particulates per mmBtu 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 3745-31-05(A)(3) (PTI 15-023)	The requirements established pursuant to this rule are equivalent to the requirements of 40 CFR Part 60.104(a)(1), 40 CFR Part 52.1881(b)(27)(ix), OAC rule 3745-17-10(B)(1), and OAC rule 3745-17-07(A).

2. Additional Terms and Conditions

2.a The permittee shall not burn any mixture of refinery fuel gas, natural gas and/or landfill gas in this emissions unit that contains hydrogen sulfide (H2S) in excess of 230 mg/dscm (0.10 gr/dscf).

II. Operational Restrictions

1. The permittee shall burn only refinery fuel gas, natural gas and/or landfill gas in this emissions unit. Hereinafter, this mixture of fuel gases shall be referred to as “refinery fuel gas”. The sulfur content of the refinery fuel gas burned in this emissions unit shall comply with the allowable SO2 emission limitation specified in section A.I.

2. All refinery fuel gas burned by this emissions unit shall be supplied from the south area fuel drum.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall continuously sample and analyze the refinery fuel gas for sulfur content using the H2S CEMS required in section A.III.2 and maintain records of the analytical results.

2. The permittee shall operate and maintain existing equipment to continuously monitor and record the concentrations of H2S in the refinery fuel gas burned in this emissions unit, in units of ppm. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13. The span value for this instrument shall be 425 mg/dscm of H2S.

3. A statement of certification of the existing H2S 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 Canton City Health Department, Air Pollution Control Division upon request.

4. The permittee shall maintain records of all data obtained by the H2S CEMS including, but not limited to, parts per million (ppm) of H2S, ppm of H2S as a rolling, 3-hour 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 CEMS that is designed to ensure continuous valid and representative readings of H2S. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. Records for the monitoring system must be kept on site and available for inspection during regular office hours.

6. The permittee shall collect samples, at least three times per week, of the refinery fuel gas for gas chromatographic analysis. The permittee shall collect refinery fuel gas samples using procedures that will ensure that sample containers are adequately purged prior to sample collection, thereby, ensuring a representative fuel gas sample. The permittee shall maintain a copy of the sampling procedures on site.

7. 7. The permittee shall maintain daily records of the actual heating value of the refinery fuel gas as burned in this emissions unit. The actual heating value (H), in Btu per scf, of the refinery fuel gas shall be calculated as follows from the results of a daily refinery fuel gas compositional analysis using gas chromatography:

   H = summation of (hi x mi)

   mi = the mass fraction of each chemical compound detected in the refinery fuel gas using chromatographic analysis; and

   hi = the higher heating value of each chemical compound detected in the refinery fuel gas, in Btu per pound of chemical, as found in the GPSA manual.

8. 8. The permittee shall use one of the following methods to conduct the compositional analysis of the refinery fuel gas samples:

   ASTM D1945-96
   ASTM D1945-96 (Wasson Modification)
   GPA Method 2261-90

   When using the Wasson Modification of ASTM Method D1945-96, the permittee shall follow, at a minimum, QA/QC requirements specified in ASTM D1945-96. The permittee shall also operate and maintain the Wasson gas chromatographic instrumentation according to the manufacturer's specifications and recommendations. Alternative, equivalent methods may be used upon written approval by the Canton City Health Department, Air Pollution Control Division.

9. 9. The permittee shall maintain daily records of each calculated, rolling, 3-hour average of the sulfur dioxide emission rate, in pounds per MMBtu, discharged from this emissions unit. The sulfur dioxide emission rate shall be calculated as follows:

   [(Rolling, 3-hour average H2S concentration, in ppmv) x (1 scf H2S/1x10^6 ppmv) x (1 mole H2S/379 scf H2S) x (1 mole S02/mole H2S) x (64 pounds of S02/mole S02)] / (daily recorded heating value of the refinery fuel gas) = sulfur dioxide mass emission rate.

10. For each day during which the permittee burns a fuel other than refinery fuel gas, the permittee shall maintain a record of the type, quantity, sulfur content, in pound of sulfur per mmdscf, and heating value, in Btu/dscf, of the fuel burned.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each rolling, 3-hour average SO2 emission rate, as calculated in section A.III.9, that exceeds the SO2 emission limitation of 0.025 pound of SO2 per mmBtu of actual heat input for the burning of refinery fuel gas.

2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas is burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

3. The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Canton City Health Department, Air Pollution Control Division 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 in the quarterly report.

4. Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit H2S concentration reports within thirty (30) days following the end of each calendar quarter to the Canton City Health Department, Air Pollution Control Division. These reports shall contain the date, commencement and completion times,

and durations of all instances of rolling, 3-hour H2S concentrations in excess of the 0.10 gr/dscf limitation, and the corrective actions taken (if any). If there are no concentrations of H2S in the refinery fuel gas 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.

V. Testing Requirements

1. Compliance with the emission limitations and control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

   0.025 pound of S02 per mmBtu of actual heat input

   Applicable Compliance Method:

   Compliance shall be demonstrated by the record keeping requirements specified in sections A.III.1 and A.III.6 through A.III.9.

   If required, the permittee shall demonstrate compliance with the above SO2 emission limitation in accordance with the procedures and methods specified in 40 CFR Part 60, Appendix A, Method 6 or one of its approved modifications and OAC rule 3745-18-04.

   b. Emission Limitation:

   0.020 pound of particulates per mmBtu of actual heat input

   Applicable Compliance Method:

   If required, the permittee shall demonstrate compliance with the above particulate emission limitation in accordance with the procedures and methods specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and OAC rule 3745-17-03(B)(10).

   c. Emission Limitation:

   20% opacity as a 6-minute average, except as provided by rule

   Applicable Compliance Method:

   If required, compliance shall be demonstrated based upon the requirements in OAC rule 3745-17-03(B)(1) and the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

   d. Emission Limitation:

   0.10 gr/dscf of H2S

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.12. If required, the permittee shall demonstrate compliance with the above H2S emission limitation in accordance with the methods and procedures specified in 40 CFR Part 60, Method 11.

2. The permittee shall perform on-going quality assurance tests for the H2S CEMS as required in section A.III.5 in accordance with the procedures specified in 40 CFR Part 60, Appendix F.

3. The permittee shall conduct annual H2S concentration testing of the refinery fuel gas from the south area fuel drum as required by 40 CFR Part 60.13(c) and section A.III.5 to verify H2S CEMS performance in accordance with the following requirements:

   a. The emissions testing shall be conducted using 40 CFR Part 60, Appendix A, Method 11 for the purpose of conducting relative accuracy evaluations.

   b. The test shall be conducted while the emissions units associated with the south area fuel drum are operating at greater than 50% of normal load.

   Not later than 30 days prior to the proposed test date(s), the permittee shall submit an Intent to Test (ITT) Notification to the Canton City Health Department, Air Pollution Control Division. The ITT Notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests and the persons who will be conducting the tests. Failure to submit such notification for review and approval prior to the test may result in the refusal to accept the ITT.

   Personnel from the Canton City Health Department, Air Pollution Control Division shall be permitted to witness the tests, 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 shall be signed by the person or persons responsible for the tests and submitted to the Canton City Health Department, Air Pollution Control Division within 30 days following completion of the tests.

VI. Miscellaneous Requirements

1. On August 28, 2001, Marathon Ashland Petroleum, LLC (MAP) and the United States of America entered into a global settlement agreement(Civil NO. 01-40119) entailing several air quality regulations. As part of the settlement, MAP agreed to achieve certain emission limits within specified time periods from its refinery located in Canton, Ohio. In meeting the following commitments, MAP is released from civil liabilities associated with 40 CFR Part 52.21 and 40 CFR Part 60, Subpart J for process heater and boiler projects which occurred prior to May 11, 2001.

   a. Install nitrogen oxide (NOx) controls on the refinery-wide set of process heaters and boilers in accordance with Paragraph 13 and Appendix C of the Global Settlement Agreement(GSA).

b. Eliminate fuel oil burning and meet the new source performance standard for fuel gas for all process heaters and boilers as outlined in Paragraph 15 and Appendix G of the GSA.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is an NPT heater with a maximum heat input of 83 MMBtu/hr. It is fired with refinery fuel gas, natural gas and/or landfill gas. It is designated as 4-30-B-1.	OAC rule 3745-18-82(E)	The SO2 emission limitation specified in OAC rule 3745-18-82(E) is equal to the SO2 emission limitation established in 40 CFR 52.1881(b)(27)(ix).

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

Emissions Unit ID: B023

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is boiler number 1 having a maximum heat input of 55 mmBtu/hr. It is fired with refinery fuel gas, natural gas and/or landfill gas. It is designated as 4-16-B-1.	40 CFR Part 60.104(a)(1)	See section A.I.2.a
	40 CFR 52.1881(b)(27)(ix)	0.025 pound of sulfur dioxide (SO2) per mmBtu of actual heat input
	OAC rule 3745-17-10(B)(1)	0.020 pound of particulates per mmBtu 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 3745-31-05(A)(3) (PTI 15-023)	The requirements established pursuant to this rule are equivalent to the requirements of 40 CFR Part 60.104(a)(1), 40 CFR Part 52.1881(b)(27)(ix), OAC rule 3745-17-10(B)(1), and OAC rule 3745-17-07(A).

2. Additional Terms and Conditions

2.a The permittee shall not burn any mixture of refinery fuel gas, natural gas and/or landfill gas in this emissions unit that contains hydrogen sulfide (H2S) in excess of 230 mg/dscm (0.10 gr/dscf).

II. Operational Restrictions

1. The permittee shall burn only a mixture of refinery fuel gas, natural gas, and/or landfill gas in this emissions unit. Hereinafter, this mixture of fuel gas shall be referred to as “refinery fuel gas”. The sulfur content of the refinery fuel gas burned in this emissions unit shall comply with the allowable SO2 emission limitation specified in section A.I.

2. All refinery fuel gas burned by this emissions unit shall be supplied from the south area fuel drum.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall continuously sample and analyze the refinery fuel gas for sulfur content using the H2S CEMS required in section A.III.2 and maintain records of the analytical results.

2. The permittee shall operate and maintain existing equipment to continuously monitor and record the concentrations of H2S in the refinery fuel gas burned in this emissions unit, in units of ppm. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13. The span value for this instrument shall be 425 mg/dscm of H2S.

3. A statement of certification of the existing H2S 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 Canton City Health Department, Air Pollution Control Division upon request.

4. The permittee shall maintain records of all data obtained by the H2S CEMS including, but not limited to, parts per million (ppm) of H2S, ppm of H2S as a rolling, 3-hour 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 CEMS that is designed to ensure continuous valid and representative readings of H2S. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. Records for the monitoring system must be kept on site and available for inspection during regular office hours.

6. The permittee shall collect samples, at least three times per week, of the refinery fuel gas for gas chromatographic analysis. The permittee shall collect refinery fuel gas samples using procedures that will ensure that sample containers are adequately purged prior to sample collection, thereby, ensuring a representative fuel gas sample. The permittee shall maintain a copy of the sampling procedures on site.

7. 7. The permittee shall maintain daily records of the actual heating value of the refinery fuel gas as burned in this emissions unit. The actual heating value (H), in Btu per scf, of the refinery fuel gas shall be calculated as follows from the results of a daily refinery fuel gas compositional analysis using gas chromatography:

   H = summation of (hi x mi)

   mi = the mass fraction of each chemical compound detected in the refinery fuel gas using chromatographic analysis; and

   hi = the higher heating value of each chemical compound detected in the refinery fuel gas, in Btu per pound of chemical, as found in the GPSA manual.

8. 8. The permittee shall use one of the following methods to conduct the compositional analysis of the refinery fuel gas samples:

   ASTM D1945-96
   ASTM D1945-96 (Wasson Modification)
   GPA Method 2261-90

   When using the Wasson Modification of ASTM Method D1945-96, the permittee shall follow, at a minimum, QA/QC requirements specified in ASTM D1945-96. The permittee shall also operate and maintain the Wasson gas chromatographic instrumentation according to the manufacturer's specifications and recommendations. Alternative, equivalent methods may be used upon written approval by the Canton City Health Department, Air Pollution Control Division.

9. 9. The permittee shall maintain daily records of each calculated, rolling, 3-hour average of the sulfur dioxide emission rate, in pounds per MMBtu, discharged from this emissions unit. The sulfur dioxide emission rate shall be calculated as follows:

   [(Rolling, 3-hour average H2S concentration, in ppmv) x (1 scf H2S/1x10^6 ppmv) x (1 mole H2S/379 scf H2S) x (1 mole S02/mole H2S) x (64 pounds of S02/mole S02)] / (daily recorded heating value of the refinery fuel gas) = sulfur dioxide mass emission rate.

10. For each day during which the permittee burns a fuel other than refinery fuel gas, the permittee shall maintain a record of the type, quantity, sulfur content, in pound of sulfur per mmdscf, and heating value, in Btu/dscf, of the fuel burned.

11. The permittee shall maintain daily records of the time periods during which each of the emissions units B024, B025, and B027 were in operation.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each rolling, 3-hour average SO2 emission rate, as calculated in section A.III.9, that exceeds the SO2 emission limitation of 0.025 pound of SO2 per mmBtu of actual heat input for the burning of refinery fuel gas.

2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas is burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

3. The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Canton City Health Department, Air Pollution Control Division 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 in the quarterly report.

4. Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit H2S concentration reports within thirty (30) days following the end of each calendar quarter to the Canton City Health Department, Air Pollution Control Division. These reports shall contain the date, commencement and completion times, and durations of all instances of rolling, 3-hour H2S concentrations in excess of the 0.10 gr/dscf limitation, and the corrective actions taken (if any). If there are no concentrations of H2S in the refinery fuel gas 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.

V. Testing Requirements

1. Compliance with the emission limitations and control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emissions Limitation:

      0.025 pound of S02 per mmBtu of actual heat input

      Applicable Compliance Method:

      Compliance shall be demonstrated by the record keeping requirements specified in sections A.III.1 and A.III.6 through A.III.9.

      If required, the permittee shall demonstrate compliance with the above SO2 emission limitation in accordance with the procedures and methods specified in 40 CFR Part 60, Appendix A, Method 6 or one of its approved modifications and OAC rule 3745-18-04.

   b. Emission Limitation:

      0.020 pound of particulates per mmBtu of actual heat input

      Applicable Compliance Method:

      If required, the permittee shall demonstrate compliance with the above particulate emission limitation in accordance with the procedures and methods specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and OAC rule 3745-17-03(B)(10).

   c. Emission Limitation:

      20% opacity as a 6-minute average, except as provided by rule

      Applicable Compliance Method:

      If required, compliance shall be demonstrated based upon the requirements in OAC rule 3745-17-03(B)(1) and the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

   d. Emission Limitation:

0.10 gr/dscf of H2S

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.12. If required, the permittee shall demonstrate compliance with the above H2S emission limitation in accordance with the methods and procedures specified in 40 CFR Part 60, Method 11.

2. The permittee shall perform on-going quality assurance tests for the H2S CEMS as required in section A.III.5 in accordance with the procedures specified in 40 CFR Part 60, Appendix F.

3. The permittee shall conduct annual H2S concentration testing of the refinery fuel gas from the south area fuel drum as required by 40 CFR Part 60.13(c) and section A.III.5 to verify H2S CEMS performance in accordance with the following requirements:

   a. The emissions testing shall be conducted using 40 CFR Part 60, Appendix A, Method 11 for the purpose of conducting relative accuracy evaluations.

   b. The test shall be conducted while the emissions units associated with the south area fuel drum are operating at greater than 50% of normal load.

   Not later than 30 days prior to the proposed test date(s), the permittee shall submit an Intent to Test (ITT) Notification to the Canton City Health Department, Air Pollution Control Division. The ITT Notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests and the persons who will be conducting the tests. Failure to submit such notification for review and approval prior to the test may result in the refusal to accept the ITT.

   Personnel from the Canton City Health Department, Air Pollution Control Division shall be permitted to witness the tests, 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 shall be signed by the person or persons responsible for the tests and submitted to the Canton City Health Department, Air Pollution Control Division within 30 days following completion of the tests.

VI. Miscellaneous Requirements

1. On August 28, 2001, Marathon Ashland Petroleum, LLC (MAP) and the United States of America entered into a global settlement agreement(Civil NO. 01-40119) entailing several air quality regulations. As part of the settlement, MAP agreed to achieve certain emission limits within specified time periods from its refinery located in Canton, Ohio. In meeting the following commitments, MAP is released from civil liabilities associated with 40 CFR Part 52.21 and 40 CFR Part 60, Subpart J for process heater and boiler projects which occurred prior to May 11, 2001.

1. Install nitrogen oxide (NOx) controls on the refinery-wide set of process heaters and boilers in accordance with Paragraph 13 and Appendix C of the Global Settlement Agreement(GSA).

2. Eliminate fuel oil burning and meet the new source performance standard for fuel gas for all process heaters and boilers as outlined in Paragraph 15 and Appendix G of the GSA.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is boiler number 1 having a maximum heat input of 55 MMBtu/hr. It is fired with refinery fuel gas, natural gas and/or landfill gas. It is designated as 4-16-B-1.	OAC rule 3745-18-82(E)	The SO2 emission limitation specified in OAC rule 3745-18-82(E) is equal to the SO2 emission limitation established in 40 CFR 52.1881(b)(27)(ix).

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is boiler number 2 having a maximum heat input of 55 MMBtu/hr. It is fired with refinery fuel gas, natural gas and/or landfill gas. It is designated as 4-16-B-2.	40 CFR 52.1881(b)(27)(ix)	0.025 pound of sulfur dioxide (SO2) per mmBtu of actual heat input
	OAC rule 3745-17-10(B)(1)	0.020 pound of particulates per mmBtu 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

None

II. Operational Restrictions

1. The permittee shall burn only a mixture of refinery fuel gas, natural gas and/or landfill gas in this emissions unit. Hereinafter, this mixture of fuel gases shall be referred to as “refinery fuel gas”. The sulfur content of the refinery fuel gas burned in this emissions unit shall comply with the allowable SO2 emission limitation specified in section A.I.

2. All refinery fuel gas burned by this emissions unit shall be supplied from the south area fuel drum.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall continuously sample and analyze the refinery fuel gas for sulfur content using the H2S CEMS required in section A.III.2 and maintain records of the analytical results.

2. The permittee shall operate and maintain existing equipment to continuously monitor and record the concentrations of H2S in the refinery fuel gas burned in this emissions unit, in units of ppm. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13. The span value for this instrument shall be 425 mg/dscm of H2S.

3. A statement of certification of the existing H2S 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 Canton City Health Department, Air Pollution Control Division upon request.

4. The permittee shall maintain records of all data obtained by the H2S CEMS including, but not limited to, parts per million (ppm) of H2S, ppm of H2S as a rolling, 3-hour 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 CEMS that is designed to ensure continuous valid and representative readings of H2S. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. Records for the monitoring system must be kept on site and available for inspection during regular office hours.

6. The permittee shall collect samples, at least three times per week, of the refinery fuel gas for gas chromatographic analysis. The permittee shall collect refinery fuel gas samples using procedures that will ensure that sample containers are adequately purged prior to sample collection, thereby, ensuring a representative fuel gas sample. The permittee shall maintain a copy of the sampling procedures on site.

7. 7. The permittee shall maintain daily records of the actual heating value of the refinery fuel gas as burned in this emissions unit. The actual heating value (H), in Btu per scf, of the refinery fuel gas shall be calculated as follows from the results of a daily refinery fuel gas compositional analysis using gas chromatography:

   H = summation of (hi x mi)

   mi = the mass fraction of each chemical compound detected in the refinery fuel gas using chromatographic analysis; and

   hi = the higher heating value of each chemical compound detected in the refinery fuel gas, in Btu per pound of chemical, as found in the GPSA manual.

8. 8. The permittee shall use one of the following methods to conduct the compositional analysis of the refinery fuel gas samples:

   ASTM D1945-96
   ASTM D1945-96 (Wasson Modification)
   GPA Method 2261-90

   When using the Wasson Modification of ASTM Method D1945-96, the permittee shall follow, at a minimum, QA/QC requirements specified in ASTM D1945-96. The permittee shall also operate and maintain the Wasson gas chromatographic instrumentation according to the manufacturer's specifications and recommendations. Alternative, equivalent methods may be used upon written approval by the Canton City Health Department, Air Pollution Control Division.

9. 9. The permittee shall maintain daily records of each calculated, rolling, 3-hour average of the sulfur dioxide emission rate, in pounds per MMBtu, discharged from this emissions unit. The sulfur dioxide emission rate shall be calculated as follows:

   [(Rolling, 3-hour average H2S concentration, in ppmv) x (1 scf H2S/1x10^6 ppmv) x (1 mole H2S/379 scf H2S) x (1 mole S02/mole H2S) x (64 pounds of S02/mole S02)] / (daily recorded heating value of the refinery fuel gas) = sulfur dioxide mass emission rate.

10. For each day during which the permittee burns a fuel other than refinery fuel gas, the permittee shall maintain a record of the type, quantity, sulfur content, in pound of sulfur per mmdscf, and heating value, in Btu/dscf, of the fuel burned.

11. The permittee shall maintain daily records of the time periods during which each of the emissions units B024, B025, and B027 were in operation.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each rolling, 3-hour average SO2 emission rate, as calculated in section A.III.9, that exceeds the SO2 emission limitation of 0.025 pound of SO2 per mmBtu of actual heat input for the burning of refinery fuel gas.

2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas is burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

3. The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Canton City Health Department, Air Pollution Control Division 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 in the quarterly report.

4. Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit H2S concentration reports within thirty (30) days following the end of each calendar quarter to the Canton City Health Department, Air Pollution Control Division. These reports shall contain the date, commencement and completion times, and durations of all instances of rolling, 3-hour H2S concentrations in excess of the 0.10 gr/dscf limitation, and the corrective actions taken (if any). If there are no concentrations of H2S in the refinery fuel gas 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.

V. Testing Requirements

1. Compliance with the emission limitations and control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

0.025 pound of S02 per mmBtu of actual heat input

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in sections A.III.1 and A.III.6 through A.III.9.

If required, the permittee shall demonstrate compliance with the above SO2 emission limitation in accordance with the procedures and methods specified in 40 CFR Part 60, Appendix A, Method 6 or one of its approved modifications and OAC rule 3745-18-04.

b. Emission Limitation:

0.020 pound of particulates per mmBtu of actual heat input

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the above particulate emission limitation in accordance with the procedures and methods specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and OAC rule 3745-17-03(B)(10).

c. Emission Limitation:

20% opacity as a 6-minute average, except as provided by rule

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the requirements in OAC rule 3745-17-03(B)(1) and the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

2. The permittee shall perform on-going quality assurance tests for the H2S CEMS as required in section A.III.5 in accordance with the procedures specified in 40 CFR Part 60, Appendix F.

3. The permittee shall conduct annual H2S concentration testing of the refinery fuel gas from the south area fuel drum as required by 40 CFR Part 60.13(c) and section A.III.5 to verify H2S CEMS performance in accordance with the following requirements:

a. The emissions testing shall be conducted using 40 CFR Part 60, Appendix A, Method 11 for the purpose of conducting relative accuracy evaluations.

b. The test shall be conducted while the emissions units associated with the south area fuel drum are operating at greater than 50% of normal load.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an Intent to Test (ITT) Notification to the Canton City Health Department, Air Pollution Control Division. The ITT Notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests and the persons who will be conducting the tests. Failure to submit such notification for review and approval prior to the test may result in the refusal to accept the ITT.

Personnel from the Canton City Health Department, Air Pollution Control Division shall be permitted to witness the tests, 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 shall be signed by the person or persons responsible for the tests and submitted to the Canton City Health Department, Air Pollution Control Division within 30 days following completion of the tests.

VI. Miscellaneous Requirements

1. On August 28, 2001, Marathon Ashland Petroleum, LLC (MAP) and the United States of America entered into a global settlement agreement(Civil NO. 01-40119) entailing several air quality regulations. As part of the settlement, MAP agreed to achieve certain emission limits within specified time periods from its refinery located in Canton, Ohio. In meeting the following commitments, MAP is released from civil liabilities associated with 40 CFR Part 52.21 and 40 CFR Part 60, Subpart J for process heater and boiler projects which occurred prior to May 11, 2001.

   a. Install nitrogen oxide (NOx) controls on the refinery-wide set of process heaters and boilers in accordance with Paragraph 13 and Appendix C of the Global Settlement Agreement(GSA).

   b. Eliminate fuel oil burning and meet the new source performance standard for fuel gas for all process heaters and boilers as outlined in Paragraph 15 and Appendix G of the GSA.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is boiler number 2 having a maximum heat input of 55	OAC rule 3745-18-82(E)	The SO2 emission limitation specified in OAC rule 3745-18-82(E) is equal to the

MMBtu/hr. It is fired with refinery fuel gas, natural gas and/or landfill gas. It is designated as 4-16-B-2.		SO2 emission limitation established in 40 CFR 52.1881(b)(27)(ix).

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is boiler number 11 having a maximum heat input of 176 MMBtu/hr. It is fired with refinery fuel gas, natural gas and/or landfill gas. It is designated as 4-16-B-11.	40 CFR 52.1881(b)(27)(ix)	0.025 pound of sulfur dioxide (SO2) per mmBtu of actual heat input
	OAC rule 3745-17-10(B)(1)	0.020 pound of particulates per mmBtu 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

None

II. Operational Restrictions

1. The permittee shall burn only a mixture of refinery fuel gas, natural gas, and/or landfill gas in this emissions unit. Hereinafter, this mixture of fuel gas shall be referred to as “refinery fuel gas”. The sulfur content of the refinery fuel gas burned in this emissions unit shall comply with the allowable SO2 emission limitation specified in section A.I.

2. All refinery fuel gas burned by this emissions unit shall be supplied from the south area fuel drum.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall continuously sample and analyze the refinery fuel gas for sulfur content using the H2S CEMS required in section A.III.2 and maintain records of the analytical results.

2. The permittee shall operate and maintain existing equipment to continuously monitor and record the concentrations of H2S in the refinery fuel gas burned in this emissions unit, in units of ppm. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13. The span value for this instrument shall be 425 mg/dscm of H2S.

3. A statement of certification of the existing H2S 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 Canton City Health Department, Air Pollution Control Division upon request.

4. The permittee shall maintain records of all data obtained by the H2S CEMS including, but not limited to, parts per million (ppm) of H2S, ppm of H2S as a rolling, 3-hour 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 CEMS that is designed to ensure continuous valid and representative readings of H2S. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. Records for the monitoring system must be kept on site and available for inspection during regular office hours.

6. The permittee shall collect samples, at least three times per week, of the refinery fuel gas for gas chromatographic analysis. The permittee shall collect refinery fuel gas samples using procedures that will ensure that sample containers are adequately purged prior to sample collection, thereby, ensuring a representative fuel gas sample. The permittee shall maintain a copy of the sampling procedures on site.

7. 7. The permittee shall maintain daily records of the actual heating value of the refinery fuel gas as burned in this emissions unit. The actual heating value (H), in Btu per scf, of the refinery fuel gas shall be calculated as follows from the results of a daily refinery fuel gas compositional analysis using gas chromatography:

   H = summation of (hi x mi)

   mi = the mass fraction of each chemical compound detected in the refinery fuel gas using chromatographic analysis; and

   hi = the higher heating value of each chemical compound detected in the refinery fuel gas, in Btu per pound of chemical, as found in the GPSA manual.

8. 8. The permittee shall use one of the following methods to conduct the compositional analysis of the refinery fuel gas samples:

   ASTM D1945-96
   ASTM D1945-96 (Wasson Modification)
   GPA Method 2261-90

   When using the Wasson Modification of ASTM Method D1945-96, the permittee shall follow, at a minimum, QA/QC requirements specified in ASTM D1945-96. The permittee shall also operate and maintain the Wasson gas chromatographic instrumentation according to the manufacturer's specifications and recommendations. Alternative, equivalent methods may be used upon written approval by the Canton City Health Department, Air Pollution Control Division.

9. 9. The permittee shall maintain daily records of each calculated, rolling, 3-hour average of the sulfur dioxide emission rate, in pounds per MMBtu, discharged from this emissions unit. The sulfur dioxide emission rate shall be calculated as follows:

   [(Rolling, 3-hour average H2S concentration, in ppmv) x (1 scf H2S/1x10^6 ppmv) x (1 mole H2S/379 scf H2S) x (1 mole S02/mole H2S) x (64 pounds of S02/mole S02)] / (daily recorded heating value of the refinery fuel gas) = sulfur dioxide mass emission rate.

   10. For each day during which the permittee burns a fuel other than refinery fuel gas, the permittee shall maintain a record of the type, quantity, sulfur content, in pound of sulfur per mmdscf, and heating value, in Btu/dscf, of the fuel burned.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each rolling, 3-hour average SO2 emission rate, as calculated in section A.III.9, that exceeds the SO2 emission limitation of 0.025 pound of SO2 per mmBtu of actual heat input for the burning of refinery fuel gas.

2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas is burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

3. The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Canton City Health Department, Air Pollution Control Division 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 in the quarterly report.

4. Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit H2S concentration reports within thirty (30) days following the end of each calendar quarter to the Canton City Health Department, Air Pollution Control Division. These reports shall contain the date, commencement and completion times, and durations of all instances of rolling, 3-hour H2S concentrations in excess of the 0.10 gr/dscf limitation, and the corrective actions taken (if any). If there are no concentrations of H2S in the refinery fuel gas 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.

V. Testing Requirements

1. Compliance with the emission limitations and control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

      0.025 pound of S02 per mmBtu of actual heat input

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirements specified in sections A.III.1 and A.III.6 through A.III.11.

If required, the permittee shall demonstrate compliance with the above SO2 emission limitation in accordance with the procedures and methods specified in 40 CFR Part 60, Appendix A, Method 6 or one of its approved modifications and OAC rule 3745-18-04.

b. Emission Limitation:

0.020 pound of particulates per mmBtu of actual heat input

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the above particulate emission limitation in accordance with the procedures and methods specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and OAC rule 3745-17-03(B)(10).

c. Emission Limitation:

20% opacity as a 6-minute average, except as provided by rule

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the requirements in OAC rule 3745-17-03(B)(1) and the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

2. The permittee shall perform on-going quality assurance tests for the H2S CEMS as required in section A.III.5 in accordance with the procedures specified in 40 CFR Part 60, Appendix F.

3. The permittee shall conduct annual H2S concentration testing of the refinery fuel gas from the south area fuel drum as required by 40 CFR Part 60.13(c) and section A.III.5 to verify H2S CEMS performance in accordance with the following requirements:

   a. The emissions testing shall be conducted using 40 CFR Part 60, Appendix A, Method 11 for the purpose of conducting relative accuracy evaluations.

   b. The test shall be conducted while the emissions units associated with the south area fuel drum are operating at greater than 50% of normal load.

   Not later than 30 days prior to the proposed test date(s), the permittee shall submit an Intent to Test (ITT) Notification to the Canton City Health Department, Air Pollution Control Division. The ITT Notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests and the persons who will be conducting the

tests. Failure to submit such notification for review and approval prior to the test may result in the refusal to accept the ITT.

Personnel from the Canton City Health Department, Air Pollution Control Division shall be permitted to witness the tests, 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 shall be signed by the person or persons responsible for the tests and submitted to the Canton City Health Department, Air Pollution Control Division within 30 days following completion of the tests.

VI. Miscellaneous Requirements

1. On August 28, 2001, Marathon Ashland Petroleum, LLC (MAP) and the United States of America entered into a global settlement agreement(Civil NO. 01-40119) entailing several air quality regulations. As part of the settlement, MAP agreed to achieve certain emission limits within specified time periods from its refinery located in Canton, Ohio. In meeting the following commitments, MAP is released from civil liabilities associated with 40 CFR Part 52.21 and 40 CFR Part 60, Subpart J for process heater and boiler projects which occurred prior to May 11, 2001.

   a. Install nitrogen oxide (NOx) controls on the refinery-wide set of process heaters and boilers in accordance with Paragraph 13 and Appendix C of the Global Settlement Agreement(GSA).

   b. Eliminate fuel oil burning and meet the new source performance standard for fuel gas for all process heaters and boilers as outlined in Paragraph 15 and Appendix G of the GSA.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is boiler number 11 having a maximum heat input of 176 MMBtu/hr. It is fired with refinery fuel gas, natural gas and/or landfill gas. It is designated as 4-16-B-11.	OAC rule 3745-18-82(E)	The SO2 emission limitation specified in OAC rule 3745-18-82(E) is equal to the SO2 emission limitation established in 40 CFR 52.1881(b)(27)(ix).

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a process boiler with a maximum heat input of 81 mmBtu/hr. It is fired with refinery fuel gas, natural gas and/or landfill gas. It is designated as 4-16-B-12.	40 CFR Part 60.104(a)(1)	See A.I.2.a below
	40 CFR 52.1881(b)(27)(ix)	0.025 pound of sulfur dioxide (SO2) per mmBtu of actual heat input
	OAC rule 3745-17-10(B)(1)	0.020 pound of particulates per mmBtu 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 3745-31-05(A)(3) (PTI 15-023)	The requirements established pursuant to this rule are equivalent to the requirements of 40 CFR Part 60.104(a)(1), 40 CFR Part 52.1881(b)(27)(ix), OAC rule 3745-17-10(B)(1), and OAC rule 3745-17-07(A).

2. Additional Terms and Conditions

2.a The permittee shall not burn any mixture of refinery fuel gas, natural gas and/or landfill gas in this emissions unit that contains hydrogen sulfide (H2S) in excess of 230 mg/dscm (0.10 gr/dscf).

II. Operational Restrictions

1. The permittee shall burn only refinery fuel gas, natural gas and/or landfill gas in this emissions unit. Hereinafter, this mixture of fuel gases shall be referred to as “refinery fuel gas”. The sulfur content of the refinery fuel gas burned in this emissions unit shall comply with the allowable SO2 emission limitation specified in section A.I.

2. All refinery fuel gas burned by this emissions unit shall be supplied from the south area fuel drum.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall continuously sample and analyze the refinery fuel gas for sulfur content using the H2S CEMS required in section A.III.2 and maintain records of the analytical results.

2. The permittee shall operate and maintain existing equipment to continuously monitor and record the concentrations of H2S in the refinery fuel gas burned in this emissions unit, in units of ppm. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13. The span value for this instrument shall be 425 mg/dscm of H2S.

3. A statement of certification of the existing H2S 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 Canton City Health Department, Air Pollution Control Division upon request.

4. The permittee shall maintain records of all data obtained by the H2S CEMS including, but not limited to, parts per million (ppm) of H2S, ppm of H2S as a rolling, 3-hour 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 CEMS that is designed to ensure continuous valid and representative readings of H2S. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. Records for the monitoring system must be kept on site and available for inspection during regular office hours.

6. The permittee shall collect samples, at least three times per week, of the refinery fuel gas for gas chromatographic analysis. The permittee shall collect refinery fuel gas samples using procedures that will ensure that sample containers are adequately purged prior to sample collection, thereby, ensuring a representative fuel gas sample. The permittee shall maintain a copy of the sampling procedures on site.

7. 7. The permittee shall maintain daily records of the actual heating value of the refinery fuel gas as burned in this emissions unit. The actual heating value (H), in Btu per scf, of the refinery fuel gas shall be calculated as follows from the results of a daily refinery fuel gas compositional analysis using gas chromatography:

   H = summation of (hi x mi)

   mi = the mass fraction of each chemical compound detected in the refinery fuel gas using chromatographic analysis; and

   hi = the higher heating value of each chemical compound detected in the refinery fuel gas, in Btu per pound of chemical, as found in the GPSA manual.

8. 8. The permittee shall use one of the following methods to conduct the compositional analysis of the refinery fuel gas samples:

   ASTM D1945-96
   ASTM D1945-96 (Wasson Modification)
   GPA Method 2261-90

   When using the Wasson Modification of ASTM Method D1945-96, the permittee shall follow, at a minimum, QA/QC requirements specified in ASTM D1945-96. The permittee shall also operate and maintain the Wasson gas chromatographic instrumentation according to the manufacturer's specifications and recommendations. Alternative, equivalent methods may be used upon written approval by the Canton City Health Department, Air Pollution Control Division.

9. 9. The permittee shall maintain daily records of each calculated, rolling, 3-hour average of the sulfur dioxide emission rate, in pounds per MMBtu, discharged from this emissions unit. The sulfur dioxide emission rate shall be calculated as follows:

   [(Rolling, 3-hour average H2S concentration, in ppmv) x (1 scf H2S/1x10^6 ppmv) x (1 mole H2S/379 scf H2S) x (1 mole S02/mole H2S) x (64 pounds of S02/mole S02)] / (daily recorded heating value of the refinery fuel gas) = sulfur dioxide mass emission rate.

10. For each day during which the permittee burns a fuel other than refinery fuel gas, the permittee shall maintain a record of the type, quantity, sulfur content, in pound of sulfur per mmdscf, and heating value, in Btu/dscf, of the fuel burned.

11. The permittee shall maintain daily records of the time periods during which each of the emissions units B024, B025, and B027 were in operation.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each rolling, 3-hour average SO2 emission rate, as calculated in section A.III.9, that exceeds the SO2 emission limitation of 0.025 pound of SO2 per mmBtu of actual heat input for the burning of refinery fuel gas.

2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas is burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

3. The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Canton City Health Department, Air Pollution Control Division 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 in the quarterly report.

4. Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit H2S concentration reports within thirty (30) days following the end of each calendar quarter to the Canton City Health Department, Air Pollution Control Division. These reports shall contain the date, commencement and completion times, and durations of all instances of rolling, 3-hour H2S concentrations in excess of the 0.10 gr/dscf limitation, and the corrective actions taken (if any). If there are no concentrations of H2S in the refinery fuel gas 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.

V. Testing Requirements

1. Compliance with the emission limitations and control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

      0.025 pound of S02 per mmBtu of actual heat input

      Applicable Compliance Method:

      Compliance shall be demonstrated by the record keeping requirements specified in sections A.III.1 and A.III.6 through A.III.9.

      If required, the permittee shall demonstrate compliance with the above SO2 emission limitation in accordance with the procedures and methods specified in 40 CFR Part 60, Appendix A, Method 6 or one of its approved modifications and OAC rule 3745-18-04.

   b. Emission Limitation:

      0.020 pound of particulates per mmBtu of actual heat input

      Applicable Compliance Method:

      If required, the permittee shall demonstrate compliance with the above particulate emission limitation in accordance with the procedures and methods specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and OAC rule 3745-17-03(B)(10).

   c. Emission Limitation:

      20% opacity as a 6-minute average, except as provided by rule

      Applicable Compliance Method:

      If required, compliance shall be demonstrated based upon the requirements in OAC rule 3745-17-03(B)(1) and the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

   d. Emission Limitation:

0.10 gr/dscf of H2S

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.12. If required, the permittee shall demonstrate compliance with the above H2S emission limitation in accordance with the methods and procedures specified in 40 CFR Part 60, Method 11.

2. The permittee shall perform on-going quality assurance tests for the H2S CEMS as required in section A.III.5 in accordance with the procedures specified in 40 CFR Part 60, Appendix F.

3. The permittee shall conduct annual H2S concentration testing of the refinery fuel gas from the south area fuel drum as required by 40 CFR Part 60.13(c) and section A.III.5 to verify H2S CEMS performance in accordance with the following requirements:

   a. The emissions testing shall be conducted using 40 CFR Part 60, Appendix A, Method 11 for the purpose of conducting relative accuracy evaluations.

   b. The test shall be conducted while the emissions units associated with the south area fuel drum are operating at greater than 50% of normal load.

   Not later than 30 days prior to the proposed test date(s), the permittee shall submit an Intent to Test (ITT) Notification to the Canton City Health Department, Air Pollution Control Division. The ITT Notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests and the persons who will be conducting the tests. Failure to submit such notification for review and approval prior to the test may result in the refusal to accept the ITT.

   Personnel from the Canton City Health Department, Air Pollution Control Division shall be permitted to witness the tests, 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 shall be signed by the person or persons responsible for the tests and submitted to the Canton City Health Department, Air Pollution Control Division within 30 days following completion of the tests.

VI. Miscellaneous Requirements

1. On August 28, 2001, Marathon Ashland Petroleum, LLC (MAP) and the United States of America entered into a global settlement agreement(Civil NO. 01-40119) entailing several air quality regulations. As part of the settlement, MAP agreed to achieve certain emission limits within specified time periods from its refinery located in Canton, Ohio. In meeting the following commitments, MAP is released from civil liabilities associated with 40 CFR Part 52.21 and 40 CFR Part 60, Subpart J for process heater and boiler projects which occurred prior to May 11, 2001.

a. Install nitrogen oxide (NOx) controls on the refinery-wide set of process heaters and boilers in accordance with Paragraph 13 and Appendix C of the Global Settlement Agreement(GSA).

b. Eliminate fuel oil burning and meet the new source performance standard for fuel gas for all process heaters and boilers as outlined in Paragraph 15 and Appendix G of the GSA.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a process boiler with a maximum heat input of 81 mmBtu/hr. It is fired with refinery fuel gas, natural gas, and/or landfill gas. It is designated as 4-16-B-12.	OAC rule 3745-18-82(E)	The SO2 emission limitation specified in OAC rule 3745-18-82(E) is equal to the SO2 emission limitation established in 40 CFR 52.1881(b)(27)(ix).

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a CCR Stabilizer Reboiler with a maximum heat input of 43 mmBtu/hr. It is fired with refinery fuel gas, natural gas and/or landfill gas. It is designated as 4-33-B-5.	40 CFR Part 60.104(a)(1)	See A.I.2.a below
	40 CFR 52.1881(b)(27)(ix)	0.025 pound of sulfur dioxide (SO2) per mmBtu of actual heat input
	OAC rule 3745-17-10(B)(1)	0.020 pound of particulates per mmBtu 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 3745-31-05(A)(3) (PTI 15-023)	The requirements established pursuant to this rule are equivalent to the requirements of 40 CFR Part 60.104(a)(1), 40 CFR Part 52.1881(b)(27)(ix), OAC rule 3745-17-10(B)(1), and OAC rule 3745-17-07(A).

2. Additional Terms and Conditions

2.a The permittee shall not burn any mixture of refinery fuel gas, natural gas and/or landfill gas in this emissions unit that contains hydrogen sulfide (H2S) in excess of 230 mg/dscm (0.10 gr/dscf).

II. Operational Restrictions

1. The permittee shall burn only refinery fuel gas, natural gas and/or landfill gas in this emissions unit. Hereinafter, this mixture of fuel gases shall be referred to as “refinery fuel gas”. The sulfur content of the refinery fuel gas burned in this emissions unit shall comply with the allowable SO2 emission limitation specified in section A.I.

2. All refinery fuel gas burned by this emissions unit shall be supplied from the north area fuel drum.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall continuously sample and analyze the refinery fuel gas for sulfur content using the H2S CEMS required in section A.III.2 and maintain records of the analytical results.

2. The permittee shall operate and maintain existing equipment to continuously monitor and record the concentrations of H2S in the refinery fuel gas burned in this emissions unit, in units of ppm. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13. The span value for this instrument shall be 425 mg/dscm of H2S.

3. A statement of certification of the existing H2S 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 G B, Performance Specification 7. Proof of certification shall be made available to representatives of the Canton City Health Department, Air Pollution Control Division upon request.

4. The permittee shall maintain records of all data obtained by the H2S CEMS including, but not limited to, parts per million (ppm) of H2S, ppm of H2S as a rolling, 3-hour 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 CEMS that is designed to ensure continuous valid and representative readings of H2S. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. Records for the monitoring system must be kept on site and available for inspection during regular office hours.

6. The permittee shall collect samples, at least three times per week, of the refinery fuel gas for gas chromatographic analysis. The permittee shall collect refinery fuel gas samples using procedures that will ensure that sample containers are adequately purged prior to sample collection, thereby, ensuring a representative fuel gas sample. The permittee shall maintain a copy of the sampling procedures on site.

7. 7. The permittee shall maintain daily records of the actual heating value of the refinery fuel gas as burned in this emissions unit. The actual heating value (H), in Btu per scf, of the refinery fuel gas shall be calculated as follows from the results of a daily refinery fuel gas compositional analysis using gas chromatography:

   H = summation of (hi x mi)

   mi = the mass fraction of each chemical compound detected in the refinery fuel gas using chromatographic analysis; and

   hi = the higher heating value of each chemical compound detected in the refinery fuel gas, in Btu per pound of chemical, as found in the GPSA manual.

8. 8. The permittee shall use one of the following methods to conduct the compositional analysis of the refinery fuel gas samples:

   ASTM D1945-96
   ASTM D1945-96 (Wasson Modification)
   GPA Method 2261-90

   When using the Wasson Modification of ASTM Method D1945-96, the permittee shall follow, at a minimum, QA/QC requirements specified in ASTM D1945-96. The permittee shall also operate and maintain the Wasson gas chromatographic instrumentation according to the manufacturer's specifications and recommendations. Alternative, equivalent methods may be used upon written approval by the Canton City Health Department, Air Pollution Control Division.

9. 9. The permittee shall maintain daily records of each calculated, rolling, 3-hour average of the sulfur dioxide emission rate, in pounds per MMBtu, discharged from this emissions unit. The sulfur dioxide emission rate shall be calculated as follows:

   [(Rolling, 3-hour average H2S concentration, in ppmv) x (1 scf H2S/1x10^6 ppmv) x (1 mole H2S/379 scf H2S) x (1 mole S02/mole H2S) x (64 pounds of S02/mole S02)] / (daily recorded heating value of the refinery fuel gas) = sulfur dioxide mass emission rate.

10. For each day during which the permittee burns a fuel other than refinery fuel gas, the permittee shall maintain a record of the type, quantity, sulfur content, in pound of sulfur per mmdscf, and heating value, in Btu/dscf, of the fuel burned.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each rolling, 3-hour average SO2 emission rate, as calculated in section A.III.9, that exceeds the SO2 emission limitation of 0.025 pound of SO2 per mmBtu of actual heat input for the burning of refinery fuel gas.

2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas is burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

3. The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Canton City Health Department, Air Pollution Control Division 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 in the quarterly report.

4. Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit H2S concentration reports within thirty (30) days following the end of each calendar quarter to the Canton City Health Department, Air Pollution Control Division. These reports shall contain the date, commencement and completion times,

and durations of all instances of rolling, 3-hour H2S concentrations in excess of the 0.10 gr/dscf limitation, and the corrective actions taken (if any). If there are no concentrations of H2S in the refinery fuel gas 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.

V. Testing Requirements

1. Compliance with the emission limitations and control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

   0.025 pound of S02 per mmBtu of actual heat input

   Applicable Compliance Method:

   Compliance shall be demonstrated by the record keeping requirements specified in sections A.III.1 and A.III.6 through A.III.9.

   If required, the permittee shall demonstrate compliance with the above SO2 emission limitation in accordance with the procedures and methods specified in 40 CFR Part 60, Appendix A, Method 6 or one of its approved modifications and OAC rule 3745-18-04.

   b. Emission Limitation:

   0.020 pound of particulates per mmBtu of actual heat input

   Applicable Compliance Method:

   If required, the permittee shall demonstrate compliance with the above particulate emission limitation in accordance with the procedures and methods specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and OAC rule 3745-17-03(B)(10).

   c. Emission Limitation:

   20% opacity as a 6-minute average, except as provided by rule

   Applicable Compliance Method:

   If required, compliance shall be demonstrated based upon the requirements in OAC rule 3745-17-03(B)(1) and the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

   d. Emission Limitation:

   0.10 gr/dscf of H2S

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.12. If required, the permittee shall demonstrate compliance with the above H2S emission limitation in accordance with the methods and procedures specified in 40 CFR Part 60, Method 11.

2. The permittee shall perform on-going quality assurance tests for the H2S CEMS as required in section A.III.5 in accordance with the procedures specified in 40 CFR Part 60, Appendix F.

3. The permittee shall conduct annual H2S concentration testing of the refinery fuel gas from the north area fuel drum as required by 40 CFR Part 60.13(c) and section A.III.5 to verify H2S CEMS performance in accordance with the following requirements:

   a. The emissions testing shall be conducted using 40 CFR Part 60, Appendix A, Method 11 for the purpose of conducting relative accuracy evaluations.

   b. The test shall be conducted while the emissions units associated with the north area fuel drum are operating at greater than 50% of normal load.

   Not later than 30 days prior to the proposed test date(s), the permittee shall submit an Intent to Test (ITT) Notification to the Canton City Health Department, Air Pollution Control Division. The ITT Notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests and the persons who will be conducting the tests. Failure to submit such notification for review and approval prior to the test may result in the refusal to accept the ITT.

   Personnel from the Canton City Health Department, Air Pollution Control Division shall be permitted to witness the tests, 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 shall be signed by the person or persons responsible for the tests and submitted to the Canton City Health Department, Air Pollution Control Division within 30 days following completion of the tests.

VI. Miscellaneous Requirements

1. On August 28, 2001, Marathon Ashland Petroleum, LLC (MAP) and the United States of America entered into a global settlement agreement(Civil NO. 01-40119) entailing several air quality regulations. As part of the settlement, MAP agreed to achieve certain emission limits within specified time periods from its refinery located in Canton, Ohio. In meeting the following commitments, MAP is released from civil liabilities associated with 40 CFR Part 52.21 and 40 CFR Part 60, Subpart J for process heater and boiler projects which occurred prior to May 11, 2001.

   a. Install nitrogen oxide (NOx) controls on the refinery-wide set of process heaters and boilers in accordance with Paragraph 13 and Appendix C of the Global Settlement Agreement(GSA).

b. Eliminate fuel oil burning and meet the new source performance standard for fuel gas for all process heaters and boilers as outlined in Paragraph 15 and Appendix G of the GSA.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a CCR Stabilizer Reboiler with a maximum heat input of 43 mmBtu/hr. It is fired with refinery fuel gas, natural gas, and/or landfill gas. It is designated as 4-33-B-5.	OAC rule 3745-18-82(E)	The SO2 emission limitation specified in OAC rule 3745-18-82(E) is equal to the SO2 emission limitation established in 40 CFR 52.1881(b)(27)(ix).

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

Emissions Unit ID: B028

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a CCR charge heater with a maximum heat input of 242 mmBtu/hr. It is fired with refinery fuel gas, natural gas and/or landfill gas. It is designated as 4-33-B-1/2/3/4.	40 CFR Part 60.104(a)(1)	See A.I.2.a below
	40 CFR 52.1881(b)(27)(ix)	0.025 pound of sulfur dioxide (SO2) per mmBtu of actual heat input
	OAC rule 3745-17-10(B)(1)	0.020 pound of particulates per mmBtu 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 3745-31-05(A)(3) (PTI 15-023)	The requirements established pursuant to this rule are equivalent to the requirements of 40 CFR Part 60.104(a)(1), 40 CFR Part 52.1881(b)(27)(ix), OAC rule 3745-17-10(B)(1), and OAC rule 3745-17-07(A).

2. Additional Terms and Conditions

2.a The permittee shall not burn any mixture of refinery fuel gas, natural gas and/or landfill gas in this emissions unit that contains hydrogen sulfide (H2S) in excess of 230 mg/dscm (0.10 gr/dscf).

II. Operational Restrictions

1. The permittee shall burn only refinery fuel gas, natural gas and/or landfill gas in this emissions unit. Hereinafter, this mixture of fuel gases shall be referred to as “refinery fuel gas”. The sulfur content of the refinery fuel gas burned in this emissions unit shall comply with the allowable SO2 emission limitation specified in section A.I.

2. All refinery fuel gas burned by this emissions unit shall be supplied from the north area fuel drum.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall continuously sample and analyze the refinery fuel gas for sulfur content using the H2S CEMS required in section A.III.2 and maintain records of the analytical results.

2. The permittee shall operate and maintain existing equipment to continuously monitor and record the concentrations of H2S in the refinery fuel gas burned in this emissions unit, in units of ppm. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13. The span value for this instrument shall be 425 mg/dscm of H2S.

3. A statement of certification of the existing H2S 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 Canton City Health Department, Air Pollution Control Division upon request.

4. The permittee shall maintain records of all data obtained by the H2S CEMS including, but not limited to, parts per million (ppm) of H2S, ppm of H2S as a rolling, 3-hour 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 CEMS that is designed to ensure continuous valid and representative readings of H2S. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. Records for the monitoring system must be kept on site and available for inspection during regular office hours.

6. The permittee shall collect samples, at least three times per week, of the refinery fuel gas for gas chromatographic analysis. The permittee shall collect refinery fuel gas samples using procedures that will ensure that sample containers are adequately purged prior to sample collection, thereby, ensuring a representative fuel gas sample. The permittee shall maintain a copy of the sampling procedures on site.

7. 7. The permittee shall maintain daily records of the actual heating value of the refinery fuel gas as burned in this emissions unit. The actual heating value (H), in Btu per scf, of the refinery fuel gas shall be calculated as follows from the results of a daily refinery fuel gas compositional analysis using gas chromatography:

   H = summation of (hi x mi)

   mi = the mass fraction of each chemical compound detected in the refinery fuel gas using chromatographic analysis; and

   hi = the higher heating value of each chemical compound detected in the refinery fuel gas, in Btu per pound of chemical, as found in the GPSA manual.

8. 8. The permittee shall use one of the following methods to conduct the compositional analysis of the refinery fuel gas samples:

   ASTM D1945-96
   ASTM D1945-96 (Wasson Modification)
   GPA Method 2261-90

   When using the Wasson Modification of ASTM Method D1945-96, the permittee shall follow, at a minimum, QA/QC requirements specified in ASTM D1945-96. The permittee shall also operate and maintain the Wasson gas chromatographic instrumentation according to the manufacturer's specifications and recommendations. Alternative, equivalent methods may be used upon written approval by the Canton City Health Department, Air Pollution Control Division.

9. 9. The permittee shall maintain daily records of each calculated, rolling, 3-hour average of the sulfur dioxide emission rate, in pounds per MMBtu, discharged from this emissions unit. The sulfur dioxide emission rate shall be calculated as follows:

   [(Rolling, 3-hour average H2S concentration, in ppmv) x (1 scf H2S/1x10^6 ppmv) x (1 mole H2S/379 scf H2S) x (1 mole S02/mole H2S) x (64 pounds of S02/mole S02)] / (daily recorded heating value of the refinery fuel gas) = sulfur dioxide mass emission rate.

10. For each day during which the permittee burns a fuel other than refinery fuel gas, the permittee shall maintain a record of the type, quantity, sulfur content, in pound of sulfur per mmdscf, and heating value, in Btu/dscf, of the fuel burned.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each rolling, 3-hour average SO2 emission rate, as calculated in section A.III.9, that exceeds the SO2 emission limitation of 0.025 pound of SO2 per mmBtu of actual heat input for the burning of refinery fuel gas.

2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas is burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

3. The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Canton City Health Department, Air Pollution Control Division 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 in the quarterly report.

4. Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit H2S concentration reports within thirty (30) days following the end of each calendar quarter to the Canton City Health Department, Air Pollution Control Division. These reports shall contain the date, commencement and completion times,

and durations of all instances of rolling, 3-hour H2S concentrations in excess of the 0.10 gr/dscf limitation, and the corrective actions taken (if any). If there are no concentrations of H2S in the refinery fuel gas 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.

V. Testing Requirements

1. Compliance with the emission limitations and control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

   0.025 pound of S02 per mmBtu of actual heat input

   Applicable Compliance Method:

   Compliance shall be demonstrated by the record keeping requirements specified in sections A.III.1 and A.III.6 through A.III.9.

   If required, the permittee shall demonstrate compliance with the above SO2 emission limitation in accordance with the procedures and methods specified in 40 CFR Part 60, Appendix A, Method 6 or one of its approved modifications and OAC rule 3745-18-04.

   b. Emission Limitation:

   0.020 pound of particulates per mmBtu of actual heat input

   Applicable Compliance Method:

   If required, the permittee shall demonstrate compliance with the above particulate emission limitation in accordance with the procedures and methods specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and OAC rule 3745-17-03(B)(10).

   c. Emission Limitation:

   20% opacity as a 6-minute average, except as provided by rule

   Applicable Compliance Method:

   If required, compliance shall be demonstrated based upon the requirements in OAC rule 3745-17-03(B)(1) and the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

   d. Emission Limitation:

   0.10 gr/dscf of H2S

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.12. If required, the permittee shall demonstrate compliance with the above H2S emission limitation in accordance with the methods and procedures specified in 40 CFR Part 60, Method 11.

2. The permittee shall perform on-going quality assurance tests for the H2S CEMS as required in section A.III.5 in accordance with the procedures specified in 40 CFR Part 60, Appendix F.

3. The permittee shall conduct annual H2S concentration testing of the refinery fuel gas from the north area fuel drum as required by 40 CFR Part 60.13(c) and section A.III.5 to verify H2S CEMS performance in accordance with the following requirements:

   a. The emissions testing shall be conducted using 40 CFR Part 60, Appendix A, Method 11 for the purpose of conducting relative accuracy evaluations.

   b. The test shall be conducted while the emissions units associated with the north area fuel drum are operating at greater than 50% of normal load.

   Not later than 30 days prior to the proposed test date(s), the permittee shall submit an Intent to Test (ITT) Notification to the Canton City Health Department, Air Pollution Control Division. The ITT Notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests and the persons who will be conducting the tests. Failure to submit such notification for review and approval prior to the test may result in the refusal to accept the ITT.

   Personnel from the Canton City Health Department, Air Pollution Control Division shall be permitted to witness the tests, 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 shall be signed by the person or persons responsible for the tests and submitted to the Canton City Health Department, Air Pollution Control Division within 30 days following completion of the tests.

VI. Miscellaneous Requirements

1. On August 28, 2001, Marathon Ashland Petroleum, LLC (MAP) and the United States of America entered into a global settlement agreement(Civil NO. 01-40119) entailing several air quality regulations. As part of the settlement, MAP agreed to achieve certain emission limits within specified time periods from its refinery located in Canton, Ohio. In meeting the following commitments, MAP is released from civil liabilities associated with 40 CFR Part 52.21 and 40 CFR Part 60, Subpart J for process heater and boiler projects which occurred prior to May 11, 2001.

   a. Install nitrogen oxide (NOx) controls on the refinery-wide set of process heaters and boilers in accordance with Paragraph 13 and Appendix C of the Global Settlement Agreement(GSA).

b. Eliminate fuel oil burning and meet the new source performance standard for fuel gas for all process heaters and boilers as outlined in Paragraph 15 and Appendix G of the GSA.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a CCR charge heater with a maximum heat input of 242 mmBtu/hr. It is fired with refinery fuel gas, natural gas, and/or landfill gas. It is designated as 4-33-B-1/2/3/4.	OAC rule 3745-18-82(E)	The SO2 emission limitation specified in OAC rule 3745-18-82(E) is equal to the SO2 emission limitation established in 40 CFR 52.1881(b)(27)(ix).

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

Emissions Unit ID: B029

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P002 - Fluidized Catalytic Cracking Unit(FCC). This emissions unit has a rated capacity of 24,500 bbls/day of fresh feed. This emissions unit is subject to the requirements of 40 CFR Part 60, Subpart J, for CO.	OAC rule 3745-31-05(A)(3) (PTI 15-01518)	0.62 pound of sulfur dioxide (SO2) per one thousand pounds of fresh feed. 533 tpy of SO2 71 lbs/hr of nitrogen oxides (NOx) 301 tpy of NOx 239 tpy of particulate emissions See sections A.I.2.e, A.I.2.f, A.I.2.g, A.I.2.h, and A.I.2.i.
	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 3745-17-11(A)(4)	77 lbs/hr of particulate emissions
	OAC rule 3745-18-82(E)(5)	The emission limitation specified by this rule is as stringent as the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-09(T)	See section A.I.2.c.
	40 CFR Part 52.1881(b)(27)(ix)	The emission limitation specified by this rule is as stringent as the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	40 CFR Part 60, Subpart J	See section A.I.2.d.
	40 CFR Part 63 Subpart CC	See section A.I.2.c.
	40 CFR Part 63, Subpart UUU 40 CFR Part 63.1563(b)	See sections A.I.2.a and A.I.2.b.

40 CFR Part 63.1563(e)	See sections A.I.2.a and A.I.2.b.
40 CFR Part 63.1564(a)	See sections A.I.2.a and A.I.2.b.
40 CFR Part 63.1565(a)	See sections A.I.2.a and A.I.2.b.
40 CFR Part 63.1577	See sections A.I.2.a and A.I.2.b.
40 CFR Part 63.1569(a)	See sections A.I.2.a and A.I.2.b.
	See sections A.I.2.a and A.I.2.b.

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 The permittee shall comply with all applicable equipment leak terms and conditions found in 40 CFR Part 63.648 (Subpart CC) and OAC rule 3745-21-09(T).

2.d The permittee shall limit CO emissions from the FCCU to 500 parts per million by volume on a dry basis (ppmvd) as a one-hour average. The CO limit shall not apply during periods of startup, shutdown or malfunction of the FCCU provided that during startup, shutdown or malfunction MAP shall, to the extent practicable, maintain and operate the affected facility in a manner consistent with good air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on monitoring results, review of operating and maintenance procedures, and inspection of the source.

2.e The emissions of sulfur dioxide from this emissions unit shall not exceed 533 tons per year, based upon a rolling, 12 month summation of the monthly emissions.

2.f The emissions of nitrogen oxide emissions from this emissions unit shall not exceed 301 tons per year, based upon a rolling, 12 month summation of the monthly emissions.

2.g The requirements of this rule also includes compliance with the requirements of all other Applicable Rules/Requirements listed in section A.I.1.

2.h The permittee shall be subject to the following emission limitations and any associated monitoring, record keeping, reporting, compliance demonstration, and testing requirements following the installation of the FCC Blower modification project as permitted under the permit-to-install modified permit application no. 15-01518 (issued on May 22, 2003): 533 tpy of SO2, 71 lbs/hr of NOx, 301 tpy of NOx, and 239 tpy of PE.

2.i The permittee shall be subject to the following emission limitations and any associated monitoring, record keeping, reporting, compliance demonstration, and testing requirements following the completion of the 2004 maintenance turnaround project as permitted under the permit-to-install modified permit application no. 15-01518 (issued on November 13, 2003): 295.6 tpy of SO2, 71 lbs/hr of NOx, 67.3 tpy of NOx, 63.1 tpy of PE, and 164.4 tpy of CO.

The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward.

2.j 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.k 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.l 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.m 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 following four 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.n [63.1569(a)(2)]
As provided in 40 CFR Part 63.6(g), the USEPA, 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 and maintain a flare system in accordance with 40 CFR Part 63.11(b) to control emissions vented from the FCC unit.

2. The maximum annual production rate for this emissions unit shall not exceed 8,185,125 bbls fresh feed/year based on a rolling, 12 month summation of the production rates.

The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward.

3. [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.

4. [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 Record Keeping Requirements

1. Pursuant to the requirements of 40 CFR Part 51, Appendix P, "Minimum Emission Monitoring Requirements", the permittee shall operate and maintain a continuous opacity monitoring system (COM) for continuously monitoring and recording the opacity of particulate emissions from this emissions unit. The COM shall comply with the requirements specified in 40 CFR Part 60.13. The continuous emission monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

    a. The permittee shall maintain records of all data obtained by the COM system including percent opacity on an instantaneous (one-minute) and six-minute block average basis, results of daily zero/span calibration checks, and magnitude calibration adjustments.

    b. A statement of certification of the existing continuous opacity monitoring system shall be maintained on site and shall include a letter from Ohio EPA detailing the results of an agency review of the certification tests and a statement by Ohio EPA 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 City of Canton Health Department, Division of Air Pollution Control upon request.

2. A statement of certification of the existing continuous CO 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 4 and 40 CFR Part 60, Appendix F, Procedure 1. Proof of certification shall be made available to the Director of Ohio EPA or the local air agency upon request.

    The permittee shall operate and maintain existing equipment to continuously monitor and record CO from this emissions unit in units of ppmv, on a dry basis. 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 continuous CO monitoring system including, but not limited to, parts per million CO (1-hour average), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

3. 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 and 40 CFR Part 60, Appendix F, Procedure 1. Proof of certification shall be made available to the Director of Ohio EPA or the local air agency upon request.

    The permittee shall operate and maintain existing equipment to continuously monitor and record NOx from this emissions unit in units of ppmv, on a dry basis and in pounds NOx per hour.

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 continuous NOx monitoring system including, but not limited to, parts per million NOx (1-hour average), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

4. 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 6 and 40 CFR Part 60, Appendix F, Procedure 1. Proof of certification shall be made available to the Director of Ohio EPA or the local air agency upon request.

   The permittee shall operate and maintain existing equipment to continuously monitor and record SO2 from this emissions unit in units of ppmv, on a dry basis and in lbs SO2/1000 lbs of fresh feed as a rolling, 3-hour average. 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 continuous SO2 monitoring system including, but not limited to, parts per million SO2, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

5. The permittee shall maintain daily records of the total pounds of fresh feed and the average hourly pounds of fresh feed.

6. The permittee shall maintain monthly records of the following information:

   a. the production rate for each month; and
   b. the rolling, 12 month summation of production rates.

The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward.

7. [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).

8. [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.].

9. [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.

10. [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.

11. [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 SO_2 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.

12. [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)

$$Q_{gas} = (1.12\ scfm/dscfm) \times (Q_{air} + Q_{oxy}) \times \left(\frac{Temp_{gas}}{273^{\circ}K}\right) \times \left(\frac{P_{vent}}{1\ atm.}\right)$$

where:

Q_{gas} = Hourly average actual gas flow rate, acfm;
1.12 = Default correction factor to convert gas flow from dry standard cubic feet per minute (dscfm) to standard cubic feet per minute (scfm);
Q_{air} = Volumetric flow rate of air to regenerator, as determined from the catalytic cracking unit control room instrumentations, dscfm;
Q_{oxy} = Volumetric flow rate of oxygen-enriched air stream to regenerator, as determined from the catalytic cracking unit control room instrumentations, dscfm;
$Temp_{gas}$ = Temperature of gas stream in vent measured as near as practical to the control device or opacity monitor, °K. For wet scrubbers, temperature of gas prior to the wet scrubber; and
P_{vent} = Absolute pressure in the vent measured as near as practical to the control device or opacity monitor, atm. When used in conjunction with opacity in the final vent stack, you can assume P_{vent} = 1 atm.

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

$$Q_{gas} = (1.12\ scfm/dscfm) \times (Q_{air} + Q_{oxy}) \times \left(\frac{Temp_{gas}}{273^{\circ}K}\right) \times \left(\frac{P_{vent}}{1\ atm.}\right)$$

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.

13. [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.

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 Canton City Health Department, Air Pollution Control Division 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, and corrective actions taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

2. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Canton City Health Department, Air Pollution Control Division 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 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 reports.

3. If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring systems malfunctions. The total operating time of the emissions was on line also shall be included in the quarterly report. The 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 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 Canton City Health Department, Air Pollution Control Division documenting all instances of 1-hour average CO emissions values in excess of the limitation specified in section A.I.1 detailing the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any).

   The permittee shall submit reports within 30 days following the end of each calendar quarter to the Canton City Health Department, Air Pollution Control Division documenting any continuous CO 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 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 reports.

5. 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 Canton City Health Department, Air Pollution Control Division documenting all instances of NOx values in excess of the limitations specified in section A.I.1 detailing the date, commencement and completion times, duration, magnitude, reason, and corrective actions taken (if any).

   The permittee shall submit reports within 30 days following the end of each calendar quarter to the Canton City Health Department, Air Pollution Control Division 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 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 reports.

   If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring systems malfunctions. The total operating time of the emissions was on line also shall be included in the quarterly report. The 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.

The permittee shall submit a summary of the excess emission report pursuant to 40 CFR Part 60.7. The summary shall be submitted to the Canton City Health Department, Air Pollution Control Division within 30 days following the end of each calendar quarter in a manner prescribed by the Canton City Health Department, Air Pollution Control Division.

6. 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 Canton City Health Department, Air Pollution Control Division documenting all instances of rolling, 3-hour average SO2 emissions values in excess of the limitation specified in section A.I.1 detailing the date, commencement and completion times, duration, magnitude, reason, and corrective actions taken (if any).

   The permittee shall submit reports within 30 days following the end of each calendar quarter to the Canton City Health Department, Air Pollution Control Division 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 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 reports.

   If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring systems malfunctions. The total operating time of the emissions was on line also shall be included in the quarterly report. The 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 quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month emission limitations for nitrogen oxides and sulfur dioxide.

8. The permittee shall submit annual reports that identify any exceedances of the rolling, 12-month production rate limitation, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted by January 31 of each year.

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.

9. [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 City of Canton Health Department, Division of Air Pollution Control 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 City of Canton Health Department, Division of Air Pollution Control 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 City of Canton Health Department, Division of Air Pollution Control 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.

10. [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 limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

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:

The monitoring and record keeping requirements under A.III.1 shall be used to demonstrate compliance. If required, Method 9 of 40 CFR Part 60, Appendix A shall be used to demonstrate compliance.

b. Emission Limitation:

77 pounds per hour particulate emissions
239 tons PE per year

Applicable Compliance Method:

If required, the procedures specified under OAC rule 3745-17-03(B)(10) shall be used to demonstrate compliance with the hourly emission limit. Compliance with the annual PE limit shall be demonstrated by maintaining records of the amount of fresh feed processed through the FCC Unit on a rolling, 12-month summation of production rates. By limiting the fresh feed processed through this emissions unit to 8,185,125 bbls fresh feed/year, annual emissions will be restricted to:

8,185,125 bbls fresh feed/yr x 58.4 pounds of PE/Mbbls of fresh feed x 1/2000
= 239 tons PE/yr

c. Emission Limitation:

0.62 pound sulfur dioxide per thousand pounds of fresh feed
533 tons SO2 per year

Applicable Compliance Method:

The monitoring and record keeping requirements under A.III.4 shall be used to demonstrate compliance with the pounds sulfur dioxide per 1000 pounds of fresh feed limitation. If required, the procedures specified under OAC rule 3745-18-04(A) shall be used to demonstrate compliance with the pounds sulfur dioxide per 1000 pounds of fresh feed limitation. The permittee shall calculate a rolling, 12 month summation of the total monthly SO2 emissions to demonstrate compliance with the annual rolling, 12 month limitation. The total monthly SO2 emissions shall be calculated as shown below:

(Average hourly SO2 concentration, in lbs SO2/1000 lbs fresh feed from the CEMS data) x (quantity of fresh feed processed in the FCC Unit per day, in 1000 lb increments of fresh feed) (number of operating hours for the FCC Unit per month) = total calculated monthly SO2 emissions

d. Emission Limitation:

72 lbs NOx per hour
301 tons NOx per year

Applicable Compliance Method:

The monitoring and record keeping requirements in section A.III.3 shall be used to demonstrate compliance with the hourly emission limitation. The permittee shall calculate a rolling, 12 month summation of the total monthly NOx to demonstrate compliance with the annual rolling, 12 month limitation. The total monthly NOx shall be calculated as specified below:

(Average hourly NOx concentration, in lbs NOx/hr. from the CEMS data) x (number of operating hours for the FCC Unit per month) = total calculated monthly NOx emissions

e. Emission Limitation:

500 ppmvd CO as a one-hour average

Applicable Compliance Method:

The Monitoring and/or Record keeping Requirements of A.III.2 shall be used to demonstrate compliance. If required, Method 10 of 40 CFR Part 60, Appendix A shall be used to demonstrate compliance. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

2. Emission Testing Requirements:

a. The permittee shall conduct emission testing for this emissions unit within a time period of 2.5 to 3 years following the permit issuance date. The emissions testing shall consist of the following tests utilizing the methods from 40 CFR Part 60, Appendix A specified below or other methods from 40 CFR Part 60, Appendix A as approved by the City of Canton Health Department, Division of Air Pollution Control:

Particulate Matter - USEPA Methods 1 through 5;
Sulfur Dioxide - USEPA Method 6; and
Organic Compounds - USEPA Method 25 or 25A.

b. All stack tests shall be conducted while the emissions unit is operating at or near its maximum capacity. The FCC emissions unit's maximum capacity shall consist of processing sour crude, operating at the FCC's maximum catalyst recirculation rate and operating at the maximum hourly cold catalyst addition rate. The FCC shall otherwise be operated under "normal operating parameters" during the test. The normal operating test parameters for the FCC shall be submitted as part of the "Intent to Test" notification by the permittee for review and approval by the Canton City Health Department, Air Pollution Control Division. The emission test shall not be performed any earlier than 90 days after any repairs to the internal cyclone of emissions unit P002.

c. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Canton City Health Department, Air Pollution Control Division for all emission tests. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and dates of the tests and the persons who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the Canton City Health Department, Air Pollution Control Division's refusal to accept the results of the emission test.

d. Personnel from the Canton City Health Department, Air Pollution Control Division shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

e. In addition to collecting data records required by the required USEPA standard test methods in 40 CFR Part 60, Appendix A, the following operating parameter data, at a minimum, shall also be recorded during each stack test:

i. FCC fresh gas oil feed, in barrels per day;
ii. feed API and density, in pounds per gallon;
iii. sulfur content of the fresh feed, in percent;
iv. air rate to the FCC regenerator, in standard cubic feet per minute;

v. FCC reactor temperature, in degrees Fahrenheit;
vi. catalyst circulation rate, in tons per hour and calculations;
vii. maximum cold catalyst addition rate, in tons per hour; and
viii. SRC addition rate, in lbs of SRC/day.

f. A comprehensive written report on the results of any emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Canton City Health Department, Air Pollution Control Division within 30 days following completion of the tests. In addition to the information identified in the General Terms and Conditions, the report shall also include the data recorded as required by section A.V.2.f.

g. The permittee shall submit continuous opacity, oxygen, and temperature monitoring data generated during the period beginning 3 weeks prior to the test date through 3 weeks after each test date.

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.

3. [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)

where:

$$R_c = K_1 Q_r\ (\%CO_2 + \%CO) + K_2 Q_a - K_3 Q_r[(\%CO/2) + \%CO_2 + \%O_2] + K_3 Q_{oxy}(\%O_{xy})$$

R_c = Coke burn-off rate, kg/hr (lb/hr);
Q_r = Volumetric flow rate of exhaust gas from catalyst regenerator before adding air or gas streams. Example: The permittee may measure after an electrostatic precipitator, but the permittee must measure before a carbon monoxide boiler, dscm/min (dscf/min);
Q_a = Volumetric flow rate of air to catalytic cracking unit catalyst regenerator, as determined from instruments in the catalytic cracking unit control room, dscm/min (dscf/min);
$\%CO_2$ = Carbon dioxide concentration in regenerator exhaust, percent by volume (dry basis);
%CO = Carbon monoxide concentration in regenerator exhaust, percent by volume (dry basis);
$\%O_2$ = Oxygen concentration in regenerator exhaust, percent by volume (dry basis);
K_1 = Material balance and conversion factor, 0.2982 (kg-min)/(hr-dscm-%) (0.0186 (lb-min)/(hr-dscf-%));
K_2 = Material balance and conversion factor, 2.088 (kg-min)/(hr-dscm) (0.1303 (lb-min)/(hr-dscf));
K_3 = Material balance and conversion factor, 0.0994 (kg-min)/(hr-dscm-%) (0.0062 (lb-min)/(hr-dscf-%));
Q_{oxy} = Volumetric flow rate of oxygen-enriched air stream to regenerator, as determined from instruments in the catalytic cracking unit control room, dscm/min (dscf/min); and
$\%O_{xy}$ = Oxygen concentration in oxygen-enriched air stream, percent by volume (dry basis).

(Eq.2)

$$E = \frac{K\ x\ C_s\ x\ Q_{sd}}{R_c}$$

where:

E = Emission rate of PM, kg/1,000 kg (lb/1,000 lb) of coke burn-off;
C_s = Concentration of PM, g/dscm (lb/dscf);
Q_{sd} = Volumetric flow rate of the catalytic cracking unit catalyst regenerator flue gas as measured by Method 2 in 40 CFR Part 60, Appendix A, dscm/hr (dscf/hr);
R_c = Coke burn-off rate, kg coke/hr (1,000 lb coke/hr); and
K = Conversion factor, 1.0 (kg ^{2}/g)/(1,000 kg) (1,000 lb/(1,000 lb)).

(Eq.3)

$$E_s = 1.0 + A\ (H/R_c)\ K'$$

where:

E_s = Emission rate of PM allowed, kg/1,000 kg (1b/1,000 lb) of coke burn-off in catalyst regenerator;
1.0 = Emission limitation, kg coke/1,000 kg (lb coke/1,000 lb);
A = Allowable incremental rate of PM emissions, 0.18 g/million cal (0.10 lb/million Btu); and
H = Heat input rate from solid or liquid fossil fuel, million cal/hr (million Btu/hr). Make sure the Canton City Health Department, Air Pollution Control Division approves procedures for determining the heat input rate.
R_c = Coke burn-off rate, kg coke/hr (1,000 lb coke/hr) determined using Equation 1 of this section; and
K' = Conversion factor to units to standard, 1.0 (kg ^{2}/g)/(1,000 kg) (10^3 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)

$$Opacity\ Limit = Opacity_{st} \times \left(\frac{1\ lb/klb\ coke\ burn}{PMEmR_{st}} \right)$$

where:

Opacity limit = Maximum permissible hourly average opacity, percent, or 10 percent, whichever is greater;
$Opacity_{st}$ = Hourly average opacity measured during the emissions unit test runs, percent; and
$PMEmR_{st}$ = PM emission rate measured during the emissions unit test, lb/1,000 lbs coke burn.

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)

$$E_{Ni_1} = C_{Ni} \text{ x } Q_{sd}$$

where:

E_{Ni1} = Mass emission rate of Ni, mg/hr (lb/hr); and
C_{Ni} = Ni concentration in the catalytic cracking unit catalyst regenerator flue gas as measured by Method 29 in Appendix A of 40 CFR Part 60, mg/dscm (lbs/dscf).

(Eq. 6)

$$Opacity_1 = \frac{13 \ g \ Ni/hr}{NiEmR1_{st}} \ x \ Opacity_{st}$$

where:

$Opacity_l$ = Opacity value for use in Equation 7 of this section, percent, or 10 percent, whichever is greater; and
$NiEmR1_{st}$ = Average Ni emission rate calculated as the arithmetic average Ni emission rate using Equation 5 of this section for each of the performance test runs, g Ni/hr.

(Eq. 7)

w

$$\text{Ni Operating Limit}_1 = \text{Opacity}_l \times Q_{mon,st} \times \text{E-Cat}_{st}$$

he
re:

Ni operating $limit_1$ = Maximum permissible hourly average Ni operating limit, percent-acfm-ppmw, i.e., your site-specific Ni operating limit;
$Q_{mon,st}$ = Hourly average actual gas flow rate as measured by the continuous parameter monitoring system during the performance test or using the alternative procedure in 40 CFR Part 63.1573 [see section A.III.], acfm; and
$E\text{-}Cat_{st}$ = 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)

$$E_{Ni_2} = \frac{C_{Ni} \text{ x } Q_{sd}}{R_c}$$

where:

E_{Ni2} = Normalized mass emission rate of Ni, mg/kg coke (lb/1,000 lbs coke).

(Eq. 9)

$$Opacity_2 = \frac{1.0 \ mg/kg \ coke}{NiEmR2_{st}} \ x \ Opacity_{st}$$

where:

$Opacity_2$ = Opacity value for use in Equation 10 of this section, percent, or 10 percent, whichever is greater; and
$NiEmR2_{st}$ = Average Ni emission rate calculated as the arithmetic average Ni emission rate using Equation 8 of this section for each of the performance test runs, mg/kg coke.

(Eq. 10)

$$\text{Ni Operating Limit}_2 = \text{Opacity}_2 \times \text{E-Cat}_{st} \text{ x } \frac{Q_{mon,st}}{R_{c,st}}$$

where:

Ni operating $limit_2$ = Maximum permissible hourly average Ni operating limit, percent-ppmw-acfm-hr/kg coke, i.e., the site-specific Ni operating limit; and
$R_{c,st}$ = Coke burn rate from Equation 1 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 City of Canton Health Department, Division of Air Pollution Control 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)

$$Ni\ Operating\ Value_1 = Opacity \times Q_{mon} \times E\text{-}Cat$$

where:

Ni operating value$_1$ = Maximum permissible hourly average Ni standard operating value, %-acfm-ppmw;
Opacity = Hourly average opacity, percent;
Q_{mon} = Hourly average actual gas flow rate as measured by continuous parameter monitoring system or calculated by alternative procedure in 40 CFR 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)

$$Ni\ Operating\ Value_2 = \frac{Opacity \times E\text{-}Cat\ x\ Q_{mon}}{R_c}$$

where:

Ni operating value$_2$ = 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 City of Canton Health Department, Division of Air Pollution Control 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 City of Canton Health Department, Division of Air Pollution Control 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 City of Canton Health Department, Division of Air Pollution Control. 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 City of Canton Health Department, Division of Air Pollution Control.

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)

$$\text{Ecat-Limit} = \frac{13\ \text{g Ni/hr}}{\text{NiEmR1}_{st}} \text{ x } \text{Ecat}_{st}$$

where:

Ecat-Limit = Operating limit for equilibrium catalyst Ni concentration, mg/kg;
$NiEmR1_{st}$ = Average Ni emission rate calculated as the arithmetic average Ni emission rate using Equation 5 of this section for each performance test run, g Ni/hr; and
$Ecat_{st}$ = 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)

$$Ecat\text{-}Limit = \frac{1.0\ mg/kg\ coke\ burn\text{-}off}{NiEmR2_{st}}\ x\ Ecat_{st}$$

w
h
ere:

$NiEmR2_{st}$ = 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 City of Canton Health Department, Division of Air Pollution Control, 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.

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.

f. [63.1576(c)]

The permittee must keep the records in 40 CFR Part 63.6(h) for visible emission observations.

g. [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.

h. [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.

i. [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.

j. [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).

k. [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.

l. [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

VI. Miscellaneous Requirements

1. MAP shall complete installation and begin and maintain operation of an electrostatic precipitator (ESP) or equivalent control technology for emissions unit P002 by no later than December 31, 2005, to ensure ongoing compliance with OAC rule 3745-17-11. MAP shall periodically and in good faith review its efforts to install the ESP and shall expedite installation of the ESP, if MAP determines that it is feasible to do so.

2. The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward, however the initial compliance reports and initial testing will need to be done before that date. The following tables from 40 CFR Part 63, Subpart UUU are attached:

Tables 1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 12; 13; 14; 36; 37; 38; 39; 40; 41; 42; 43 and 44.

TABLE 1 TO Subpart UUU OF PART 63.—METAL HAP EMISSION LIMITS FOR CATALYTIC CRACKING UNITS

[As stated in § 63.1564(a)(1), you must meet each emission limitation in the following table that applies to you]

For each new or existing catalytic cracking unit * * *	You must meet the following emission limits for each catalyst regenerator vent * *
1. Subject to the new emissions unit performance standard (NSPS) for PM in 40 CFR Part 60.102.	PM emissions must not exceed 1.0 kilogram (kg) per 1,000 kg (1.0 lb/1,000 lb) of coke burn-off in the catalyst regenerator; if the discharged gases pass through an incinerator or waste heat boiler in which you burn auxiliary or supplemental liquid or solid fossil fuel, you must limit the incremental rate of PM to no more than 43.0 grams per Megajoule (g/MJ) or 0.10 pounds per million British thermal units (lb/million Btu) of heat input attributable to the liquid or solid fossil fuel; and the opacity of emissions must not exceed 30 percent, except for one 6-minute average opacity reading in any 1-hour period.
2. Option 1: NSPS requirements not subject to the NSPS for PM in 40 CFR Part 60.102.	PM emissions must not exceed 1.0 kg/1,000 kg (1.0 lb/1,000 lb) of coke burn-off in the catalyst regenerator; if the discharged gases pass through an incinerator or waste heat boiler in which you burn auxiliary or in supplemental liquid or solid fossil fuel, you must limit the incremental rate of PM to no more than 43.0 g/MJ or lb/million Btu of heat input attributable to the liquid or solid fossil fuel; and the opacity of emissions must not exceed 30 percent, except for one 6-minute average opacity reading in any 1-hour period.
3. Option 2: PM limit not subject to the NSPS for PM in 40 CFR Part 60.102.	PM emissions must not exceed 1.0 kg/1,000 kg (1.0 lb/1,000 lbs) of coke burn-off in the catalyst regenerator.
4. Option 3: Ni lb/hr not subject to the NSPS for PM in 40 CFR Part 60.102.	Nickel (Ni) emissions must not exceed 13,000 milligrams per hour (mg/hr) (0.029 lb/hr).
5. Option 4: Ni Lb/1,000 lbs of coke burn-off not subject to the NSPS for PM in 40 CFR Part 60.102.	Ni emissions must not exceed 1.0 mg/kg (0.001 lb/1,000 lbs) of coke burn-off in the catalyst regenerator.

TABLE 2 TO Subpart UUU OF PART 63.—OPERATING LIMITS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS

[As stated in § 63.1564(a)(2), you must meet each operating limit in the following table that applies to you]

For each new or existing catalytic cracking unit * * *	For this type of continuous monitoring system * * *	For this type of control device * * *	You must meet this operating limit * * *
1. Subject to the NSPS for PM in 40 CFR Part 60.102.	Continuous opacity monitoring system.	Not applicable	Not applicable.
2. Option 1: NSPS requirements not subject to the NSPS for PM in 40 CFR Part 60.102.	Continuous opacity monitoring system.	Not applicable	Not applicable.
3. Option 2: PM limit not subject to the NSPS for PM in 40 CFR Part 60.102.	a. Continuous opacity monitoring system.	Electrostatic precipitator	Maintain the hourly average opacity of emissions from your catalyst regenerator vent no higher than the site-specific opacity limit established during the performance test.
	b. Continuous parameter monitoring systems.	Electrostatic precipitator	Maintain the daily average gas flow rate no higher than the limit established in the performance

	c. Continuous parameter monitoring systems.	Wet scrubber	test; and maintain the daily average voltage and secondary current (or total power input) above the limit established in the performance test. Maintain the daily average pressure drop above the limit established in the performance test (not applicable to a wet scrubber of the non-venturi jet-ejector design); and maintain the daily average liquid-to-gas ratio above the limit established in the performance test.
4. Option 3: Ni lb/hr not subject to the NSPS for PM in 40 CFR 60.102.	a. Continuous opacity monitoring system.	Electrostatic precipitator	
(Continued)	b. Continuous parameter monitoring systems.	i. Electrostatic precipitator	Maintain the daily average Ni operating value no higher than the limit established during the performance test. Maintain the daily average gas flow rate no higher than the limit established during the performance test; maintain the monthly rolling average of the equilibrium catalyst Ni concentration no higher than the limit established during the performance test; and maintain the daily average voltage and secondary current (or total power input) above the established during the performance test.

(Cont.) TABLE 2 TO Subpart UUU OF PART 63.—OPERATING LIMITS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS

[As stated in § 63.1564(a)(2), you must meet each operating limit in the following table that applies to you]

For each new or existing catalytic cracking unit * * *	For this type of continuous monitoring system * * *	For this type of control device * * *	You must meet this operating limit * * *
		ii. Wet scrubber	Maintain the monthly rolling average of the equilibrium catalyst Ni concentration no higher than the limit established during the performance test; maintain the daily average pressure drop above the limit established during the performance test (not applicable to a non-venturi wet scrubber of the jet-ejector design);and maintain the daily average liquid-to-gas ratio above the limit established during
5. Option 4: Ni lb/1,000 lbs of coke	a. Continuous opacity monitoring	Electrostatic precipitator	

burn-off not subject to the NSPS for PM in 40 CFR Part 60.102.	system b. Continuous parameter monitoring systems.	i. Electrostatic precipitator .... ii. Wet scrubber	the performance test. Maintain the daily average Ni operating value no higher than the Ni operating limit established during the performance test. Maintain the monthly rolling average of the equilibrium catalyst Ni concentration no higher than the limit established during the performance test; and maintain the daily average voltage and secondary current for total power input) above the limit established during the performance test. Maintain the monthly rolling average of the equilibrium catalyst Ni concentration no higher than the limit established during the performance test; maintain the daily average pressure drop above the limit established during the performance test (not applicable to a non-venturi wet scrubber of the jet-ejector design); and maintain the daily average liquid-to-gas ratio above the limit established during the performance test.

TABLE 3 TO Subpart UUU OF PART 63.—CONTINUOS MONITORING SYSTEMS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS

[As stated in § 63.1564(b)(1), you must meet each requirement in the following table that applies to you]

For each new or existing catalytic cracking unit * * *	If your catalytic cracking unit is * * *	And you use this type of control device for your vent * * *	You must install, operate, and maintain a * * *
1. Subject to the NSPS for PM in 40 CFR Part 60.102.	Any size	Electrostatic precipitator or wet scrubber or no control device.	Continuos opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent.
2. Option 1: NSPS limits not subject to the NSPS for PM in 40 CFR Part 60.102.	Any size	Electrostatic precipitator or wet scrubber or no control device.	Continuous opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent.
3. Option 2: PM limit not subject to the NSPS for PM in 40 CFR Part 60.102.	a. Over 20,000 barrels per day fresh feed capacity.	Electrostatic precipitator	Continuos opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent.
	b. Up to 20,000 barrels per day fresh feed capacity.	Electrostatic precipitator	Continuous opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent; or continuous parameter monitoring systems to measure

	c. Any size	i. Wet scrubber	and record the gas flow rate to the control device and the voltage and secondary current (or total power input) to the control device. (1) Continuous parameter monitoring system to measure and record the pressure drop across the scrubber, gas flow rate to the scrubber, and total liquid (or scrubbing liquor) flow rate to the scrubber. (2) If you use a wet scrubber of the non-venturi jet-ejector design, you're not required to install and operate a continuous parameter monitoring system for pressure drop.
	d. Any size	No electrostatic precipitator or wet scrubber.	
4. Option 3: Ni lb/hr not subject to the NSPS for PM in 40 CFR 60.102. *(Continued)*	a. Over 20,000 barrels per day fresh feed capacity.	Electrostatic precipitator	Continuos opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent. Continuos opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent and continuous parameter monitoring system to measure and record the gas flow rate.

Continued) TABLE 3 TO Subpart UUU OF PART 63.—CONTINUOS MONITORING SYSTEMS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS

[As stated in § 63.1564(b)(1), you must meet each requirement in the following table that applies to you]

For each new or existing catalytic cracking unit * * *	If your catalytic cracking unit is * * *	And you use this type of control device for your vent * * *	You must install, operate, and maintain a * * *
	b. Up to 20,000 barrels per day fresh feed capacity.	Electrostatic precipitator	Continuous opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent and continuous parameter monitoring system to measure and record the gas flow rate; or continuous parameter monitoring systems to measure and record the gas flow rate and the voltage and secondary current (or total power input) to the control device.
	c. Any size	Wet scrubber	(1) Continuous parameter monitoring system to measure and record the pressure drop across the scrubber, gas flow rate to the scrubber, and total liquid (or scrubbing liquor) flow rate to the scrubber. (2) If you use a wet scrubber of the non-venturi jet-ejector, design, you're not required to install and operate a continuous parameter monitoring system for pressure drop.
5. Option 4: Ni lb/1,000 lbs of coke burn-off not subject to the NSPS for PM in 40 CFR Part 60.102.	d. Any size	No electrostatic precipitator or wet scrubber.	Continuous opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent and continuous parameter monitoring system to measure and record the gas flow rate.
	a. Over 20,000 barrels per day fresh feed capacity.	Electrostatic precipitator	Continuous opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent and continuous parameter monitoring system to measure and record the gas flow rate.
	b. Up to 20,000 barrels per day fresh feed capacity.	Electrostatic precipitator	Continuous opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent and continuous parameter monitoring system to measure and record the gas flow rate; or continuous parameter monitoring systems to measure and record the gas flow rate and the voltage and secondary current

Continued)			(or total power input) to the control device.

Continued) TABLE 3 TO Subpart UUU OF PART 63.—CONTINUOS MONITORING SYSTEMS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS

[As stated in § 63.1564(b)(1), you must meet each requirement in the following table that applies to you]

For each new or existing catalytic cracking unit * * *	If your catalytic cracking unit is * * *	And you use this type of control device for your vent * * *	You must install, operate, and maintain a * * *
	c. Any size	Wet scrubber	Continuous parameter monitoring system to measure and record the pressure drop across the scrubber, gas flow rate to the scrubber, and total liquid (or scrubbing liquor) flow rate to the scrubber.
	d. Any size	No electrostatic precipitator or wet scrubber	Continuous opacity monitoring system to measure and record the opacity of emissions from each catalyst regenerator vent and continuous parameter monitoring system to measure and record the gas flow rate.

TABLE 4 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS NOT SUBJECT TO THE NEW Emissions unit PERFORMANCE STANDARD (NSPS) FOR PARTICULATE MATTER (PM)

[As stated in § 63.1564(b)(2), you must meet each requirement in the following table that applies to you]

For each new or existing catalytic cracking unit catalyst regenerator vent * * *	You must * * *	Using * * *	According to these requirements * * *
1. If you elect Option 1 in item 2 of Table 1, Option 2 in item 3 of Table 1, Option 3 in item 4 of Table 1, or Option 4 in item 5 of Table 1 of this subpart.	a. Select sampling port's location and the number of traverse ports.	Method 1 or 1A in Appendix A to part 60 of this chapter.	Sampling sites must be located at the outlet of the control device or the outlet of the regenerator, as applicable, and prior to any releases to the atmosphere.
	b. Determine velocity and volumetric flow rate.	Method 2, 2A, 2C, 2D, 2F, or 2G in Appendix A to part 60 of this chapter, as applicable.	
	c. Conduct gas molecular weight analysis.	Method 3, 3A, or 3B in appendix A to part 60 of this chapter, as applicable.	
	d. Measure moisture content of the stack gas.	Method 4 in Appendix A to part 60 of this chapter.	
	e. If you use an electro-static precipitator, record the total number of fields in the control system and how many operated during the applicable performance test.		
	f. If you use a wet scrubber, record the total amount (rate) of water (or scrubbing liquid) and the amount (rate) of makeup liquid to the scrubber during each test run.		
2. Option 1: Elect NSPS	a. Measure PM emissions	Method 5B or 5F (40 CFR Part 60, Appendix A) to determine PM emissions and associated moisture content for units without wet scrubbers. Method 5B (40 CFR Part 60, Appendix A) to determine PM emissions and associated moisture content for unit with wet scrubber.	You must maintain a sampling rate of at least 0.15 dry standard cubic meters per minute (dscm/min) (0.53 dry standard cubic feet per minute (dscf/min)).
	b. Compute PM emission rate (lbs/1,000 lbs) of coke burn-off.	Equations 1, 2, and 3 of § 63.1564 (if applicable).	
	c. Measure opacity of emissions.	Continuous opacity monitoring system.	You must collect opacity monitoring data every 10 seconds during the entire period of the initial Method 5 performance test and reduce the data to 6-minute averages.
3. Option 2: PM limit	a. Measure PM emissions	See item 2. of this table	
	b. Compute coke burn-off rate and PM emission rate.	Equations 1 and 2 of § 63.1564	See item 2. of this table.

(Continued)			

(Continued) TABLE 4 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS NOT SUBJECT TO THE NEW Emissions unit PERFORMANCE STANDARD (NSPS) FOR PARTICULATE MATTER (PM)
[As stated in § 63.1564(b)(2), you must meet each requirement in the following table that applies to you]

For each new or existing catalytic cracking unit catalyst regenerator vent * * *	You must * * *	Using * * *	According to these requirements * * *
	c. Establish your site-specific opacity operating limit if you use a continuous opacity monitoring system.	Data from the continuous opacity monitoring system.	You must collect opacity monitoring data every 10 seconds during the entire period of the initial Method 5 performance test and reduce the data to 6-minute averages; determine and record the hourly average opacity from all the 6-minute averages; and compute the site-specific limit using Equation 4 of § 63.1564.
4. Option 3: Ni lb/hr	a. Measure concentration of Ni and total metal HAP.	Method 29 (40 CFR Part 60, Appendix A).	You must maintain a sampling rate of at least 0.028 dscm/min (0.74 dscf/min).
	b. Compute Ni emission rate (lb/hr).	Equation 5 of § 63.1564	
	c. Determine the equilibrium catalyst Ni concentration.	EPA Method 6010B or 6020 or EPA Method 7520 or 7521 in SW–846 [1]; or, you can use an alternative method satisfactory to the Administrator.	You must obtain 1 sample for each of the 3 runs; determine and record the average equilibrium catalyst Ni concentration for each of the 3 runs; and you may adjust the results for an individual run to the maximum value using Equation 1 of § 63.1571.
	d. If you use a continuous opacity monitoring system, establish your site-specific Ni operating limit.	i. Equations 6 and 7 of § 63.1564 using data from continuous opacity monitoring system, gas flow rate, results of equilibrium catalyst Ni concentration analysis, and Ni emission rate from Method 29 test.	(1) You must collect opacity monitoring data every 10 seconds during the entire period of the initial Ni performance test; reduce the data to 6-minute averages; and determine and record the hourly average opacity from all the 6-minute averages. (2) You must collect gas flow rate monitoring data every 15 minutes during the entire period of the initial Ni performance test; measure the gas flow as near as practical to the continuous opacity monitoring system; and determine and record the hourly average actual gas flow rate
5. Option 4: Ni lbs/1,000 lbs of coke burn-off.	a. Measure concentration of Ni and total metal HAP.	Method 29 (40 CFR Part 60, appendix A).	
	b. Compute Ni emission rate (lb/ 1,000 lbs of coke burn-off).		

(Continued)	c. Determine the equilibrium catalyst Ni concentration.	Equations 1 and 8 of § 63.1564. EPA Method 6010B or 6020 or EPA Method 7520 or 7521 (SW–846) 1; or, you can use an alternative method satisfactory to the Administrator.	from all the readings. You must maintain a sampling rate of at least 0.028 dscm/min (0.74 dscf/min). You must obtain 1 sample for each of the 3 runs; determine and record the equilibrium catalyst Ni concentration for each of the 3 samples; and you may adjust the laboratory results to the maximum value using Equation 2 of § 63.1571.

(Continued) TABLE 4 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS NOT SUBJECT TO THE NEW Emissions unit PERFORMANCE STANDARD (NSPS) FOR PARTICULATE MATTER (PM)
[As stated in § 63.1564(b)(2), you must meet each requirement in the following table that applies to you]

For each new or existing catalytic cracking unit catalyst regenerator vent * * *	You must * * *	Using * * *	According to these requirements * * *
	d. If you use a continuous opacity monitoring system, establish your site-specific Ni operating limit.	i. Equations 9 and 10 of § 63.1564 with data from continuous opacity monitoring system, coke burn-off rate, gas flow rate, results of equilibrium catalyst Ni concentration analysis, and Ni emission rate from Method 29 test.	(1) You must collect opacity monitoring data every 10 seconds during the entire period of the initial Ni performance test; reduce the data to 6-minute averages; and determine and record the hourly average opacity from all the 6-minute averages. (2) You must collect gas flow rate monitoring data every 15 minutes during the entire period of the initial Ni performance test; measure the gas flow rate as near as practical to the continuous opacity monitoring system; and determine and record the hourly average actual gas flow rate from all the readings.
	e. Record the catalyst addition rate for each test and schedule for the 10-day period prior to the test.		
6. If you elect Option 2 in Entry 3 in Table 1, Option 3 in Entry 4 in Table 1, or Option 4 in Entry 5 in Table 1 of this Subpart And you use continuous parameter monitoring systems.	a. Establish each operating limit in Table 2 of this subpart that applies to you.	Data from the continuous parameter monitoring systems and applicable performance test methods.	
	b. Electrostatic precipitator or wet scrubber: gas flow rate.	Data from the continuous parameter monitoring systems and applicable performance test methods.	
		Data from the continuous parameter monitoring systems and	You must collect gas flow rate monitoring data every 15 minutes during the entire

	c. Electrostatic precipitator: voltage and secondary current (or total power input). d. Electrostatic precipitator or wet scrubber: equilibrium catalyst Ni concentration. e. Wet scrubber: pressure drop (not applicable to non-venturi scrubber of jet ejector design).	applicable performance test methods. Results of analysis for equilibrium catalyst Ni concentration. Data from the continuous parameter monitoring systems and applicable performance test methods	period of the initial performance test; and determine and record the maximum hourly average gas flow rate from all the readings. You must collect voltage and secondary current (or total power input) monitoring data every 15 minutes during the entire period of the initial performance test; and determine and record the minimum hourly average voltage and secondary current (or total power input) from all the readings. You must determine and record the average equilibrium catalyst Ni concentration for the 3 runs based on the laboratory results. You may adjust the value using Equation 1 or 2 of § 63.1571 as applicable. You must collect pressure drop monitoring data every 15 minutes during the entire period of the initial performance test; and determine and record the minimum hourly average pressure drop from all the readings.
(Continued)			

(Continued) TABLE 4 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS NOT SUBJECT TO THE NEW Emissions unit PERFORMANCE STANDARD (NSPS) FOR PARTICULATE MATTER (PM)
[As stated in § 63.1564(b)(2), you must meet each requirement in the following table that applies to you]

For each new or existing catalytic cracking unit catalyst regenerator vent * * *	You must * * *	Using * * *	According to these requirements * * *
	f. Wet scrubber: liquid-to-gas ratio	Data from the continuous parameter monitoring systems and applicable performance test methods.	You must collect gas flow rate and total water (or scrubbing liquid) flow rate monitoring data every 15 minutes during the entire period of the initial performance test; determine and record the hourly average gas flow rate and total water (or scrubbing liquid) flow rate from all the readings; and determine and record the minimum liquid-to-gas ratio
	g. Alternative procedure for gas flow rate.	Data from the continuous parameter monitoring systems and applicable performance test methods.	You must collect air flow rate monitoring data or determine the air flow rate using control room instrumentation every 15 minutes during the entire period of the initial performance test; determine and record the hourly average rate of all the readings; and determine and record the maximum gas flow rate using Equation 1 of § 63.1573.

TABLE 5 TO Subpart UUU OF PART 63.—INITIAL COMPLIANCE WITH METAL HAP EMISSION LIMITS FOR CATALYTIC CRACKING UNITS
[As stated in § 63.1564(b)(5), you must meet each requirement in the following table that applies to you]

For each new and existing catalytic cracking unit catalyst regenerator vent * *	For the following emission limit * * *	You have demonstrated initial compliance if * * *
1. Subject to the NSPS for PM in 40 CFR 60.102.	PM emissions must not exceed 1.0 kg/1,000 kg (1.0 lb/1,000 lb) of coke burn-off in the catalyst regenerator; if the discharged gases pass through an incinerator or waste heat boiler in which you burn auxiliary or supplemental liquid or solid fossil fuel, you must limit the incremental rate of PM to no more than 43.0 grams per Megajoule (g/MJ) or 0.10 pounds per million British thermal units (lb/million Btu) of heat input attributable to the liquid or solid fossil fuel; and the opacity of emissions 30 percent, except for one 6-minute average opacity reading in any 1-hour period.	You have already conducted a performance test to demonstrate initial compliance with the NSPS and the measured PM emission rate is less than or equal to 1.0 kg/1,000 kg (1.0 lb/1,000 lb) of coke burn-off in the catalyst regenerator. As part of the Notification of Compliance Status, you must certify that your vent meets the PM limit. You are not required to do another performance test to demonstrate initial compliance. If applicable, you have already conducted a performance test to demonstrate initial compliance with the NSPS and the measured PM rate is less than or equal to 43.0 g/MJ or 0.010 lb/million Btu of heat input attributable to the liquid or solid fossil fuel. As part of the Notification of Compliance Status, you must certify that your vent meets the PM emission limit. You are not required to do another performance test to demonstrate initial compliance. You have already conducted a performance test to demonstrate initial compliance with the NSPS and the

		average hourly opacity of emissions is no more than 30 percent. Except: one 6-minute average in any 1-hour period can exceed 30 percent. As part of the Notification of Compliance Status, you must certify that your vent meets the opacity limit. You are not required to do another performance test to demonstrate initial compliance. You have already conducted a performance evaluation to demonstrate initial compliance with the applicable performance specification. As part of your Notification of Compliance Status, you certify that your continuous opacity monitoring system meets the requirements in § 63.1572. You are not required to do a performance evaluation to demonstrate initial compliance.
2. Option 1: Elect NSPS not subject to the NSPS for PM. *(Continued on next page)*	PM emissions must not exceed 1.0 kg/1,000 kg (1.0 lb/1,000 lb) of coke burn-off in the catalyst regenerator; if the discharged gases pass through an incinerator or waste heat boiler in which you burn auxiliary or supplemental liquid or solid fossil fuel, you must limit the incremental rate of PM to no more than 43.0 grams per Megajoule (g/MJ) or 0.10 pounds per million British thermal units (lb/million Btu) of heat input attributable to the liquid or solid fossil fuel; and the opacity of emissions must not exceed 30 percent, except for one 6-minute average opacity reading in any 1-hour period.	The average PM emission rate, measured using EPA method 5 over the period of the initial performance test, is no higher than 1.0 kg/1,000 kg (1.0 lb/1,000 lbs) of coke burn-off in the catalyst regenerator. The PM emission rate is calculated using Equations 1 and 2 of the § 63.1564. If applicable, the average PM emission rate, measured using EPA Method 5 over the period of the initial performance test, is no higher than 43.0 g/MJ or 0.010 lb/million Btu of heat input attributable to the liquid or solid fossil fuel. The PM emission rate is calculated using Equation 3 of § 63.1564; no more than one 6-minute average measured by the continuous opacity monitoring system exceeds 30 percent opacity in any 1-hour period over the period of the performance test; and your performance evaluation shows the continuous opacity monitoring system meets the applicable requirements in § 63.1572.

(Cont.) TABLE 5 TO Subpart UUU OF PART 63.—INITIAL COMPLIANCE WITH METAL HAP EMISSION LIMITS FOR CATALYTIC CRACKING UNITS

[As stated in § 63.1564(b)(5), you must meet each requirement in the following table that applies to you]

For each new and existing catalytic cracking unit catalyst regenerator vent * *	For the following emission limit * * *	You have demonstrated initial compliance if * * *
3. Option 2: not subject to the NSPS for PM	PPM emissions must not exceed 1.0 kg/1,000 kg (1.0 lb/1,000 lb) of coke burn-off in the catalyst regenerator.	The average PM emission rate, measured using EPA Method 5 over the period of the initial performance test, is less than or equal to 1.0 kg/1,000 kg (1.0 lb/1,000 lbs) of coke burn-off in the catalyst regenerator. The PM emission rate is calculated using Equations 1 and 2 of § 63.1564; and if you use a continuous opacity monitoring system, your performance evaluation shows the system meets the applicable requirements in § 63.1572.

4. Option 3: not subject to the NSPS for PM	Nickel (Ni) emissions from your catalyst regenerator vent must not exceed 13,000 mg/hr (0.029 lb/hr).	The average Ni emission rate, measured using Method 29 over the period of the initial performance test, is not more than 13,000 mg/hr (0.029 lb/hr). The Ni emission rate is calculated using Equation 5 of § 63.1564; and if you use a continuous opacity monitoring system, your performance evaluation shows the system meets the applicable requirements in § 63.1572.
5. Option 4: Ni lb/1,000 lbs of coke burn-off not subject to the NSPS for PM.	Ni emissions from your catalyst regenerator vent must not exceed 1.0 mg/kg (0.001 lb/1,000 lbs) of coke burn-off in the catalyst regenerator.	The average Ni emission rate, measured using Method 29 over the period of the initial performance test, is not more than 1.0 mg/kg (0.001 lb/1,000 lbs) of coke burn-off in the catalyst regenerator. The Ni emission rate is calculated using Equation 8 of § 63.1564; and if you use a continuous opacity monitoring system, your performance evaluation shows the system meets the applicable requirements in § 63.1572.

TABLE 6 TO Subpart UUU OF PART 63.—CONTINUOUS COMPLIANCE WITH METAL HAP EMISSION LIMITS FOR CATALYTIC CRACKING UNITS

[As stated in § 63.1564(c)(1), you must meet each requirement in the following table that applies to you]

For each new and existing catalytic cracking unit * * *	Subject to this emission limit for your catalyst regenerator vent * * *	You must demonstrate continuous compliance by * * *
1. Subject to the NSPS for PM in 40 CFR 60.102.	a. PM emissions must not exceed 1.0 lb/1,000 lbs of coke burn-off in the catalyst regenerator; if the discharged gases pass through an incinerator or waste heat boiler in which you burn auxiliary or supplemental liquid or solid fossil fuel, incremental rate of PM can't exceed 43.0 g/MJ (0.10 lb/million Btu) of heat input attributable to the liquid or solid fossil fuel; and opacity of emissions can't exceed 30 percent, except for one 6-minute average opacity reading in any 1-hour period.	i. Determining and recording each day the average coke burn-off rate (thousands of kilograms per hour) using Equation 2 in § 63.1564 and the hours of operation for each catalyst regenerator; maintaining PM emission rate below 1.0 kg/1,000 kg (1.0 lb/1,000 lbs) of coke burn-off; if applicable, determining and recording each day the rate of combustion of liquid or solid fossil fuels (liters/hour or kilograms/hour) using Equation 3 of § 63.1564 and the hours of operation during which liquid or solid fossil fuels are combusted in the incinerator waste heat boiler; if applicable, maintaining PM rate below 43 g/MJ (0.10 lb/million Btu) of heat input attributable to the solid or liquid fossil fuel; collecting the continuous opacity monitoring data for each catalyst regenerator vent according to § 63.1572; and maintaining each 6-minute average at or below 30 percent except that one 6-minute average during a 1-hour period can exceed 30 percent.
2. Option 1: Elect NSPS not subject to the NSPS for PM in 40 CFR Part 60.102.	See item 1.a. of this table	See item 1.a.i. of this table.
3. Option 2: PM limit not subject to the NSPS for PM.	PM emissions must not exceed 1.0 lb/1,000 lbs of coke burn-off in the catalyst regenerator.	Determining and recording each day the average coke burn-off rate (thousands of

4. Option 3: Ni lb/hr not subject to the NSPS for PM. 5. Option 4: Ni lb/1,000 lbs of coke burn-off not subject to the NSPS for PM.	Ni emissions must not exceed 13,000 mg/hr (0.029 lb/hr). Ni emissions must not exceed 1.0 mg/kg (0.001 lb/1,000 lbs) of coke burn-off in the catalyst regenerator.	kilograms per hour) and the hours of operation for each catalyst regenerator by Equation 2 of § 63.1564. You can use process data to determine the volumetric flow rate; and maintaining PM emission rate below 1.0 kg/ 1,000 kg (1.0 lb/1,000 lbs) of coke burn-off. Maintaining Ni emission rate below 13,000 mg/hr (0.029 lb/hr). Determining and recording each day the average coke burn-off rate (thousands of kilograms per hour) and the hours of operation for each catalyst regenerator by Equation 2 of § 63.1564. You can use process data to determine the volumetric flow rate; and maintaining Ni emission rate below 1.0 mg/ kg (0.001 lb/1,000 lbs) of coke burn-off in the catalyst regenerator.

TABLE 7 TO Subpart UUU OF PART 63.—CONTINUOUS COMPLIANCE WITH OPERATING LIMITS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS

[As stated in § 63.1564(c)(1), you must meet each requirement in the following table that applies to you]

For each new or existing catalytic cracking unit * * *	If you use * * *	For this operating limit * * *	You must demonstrate continuous compliance by * * *
1. Subject to NSPS for PM in 40 CFR Part 60.102.	Continuous opacity monitoring system.	Not applicable	Complying with Table 6 of this subpart.
2. Option 1: Elect NSPS not subject to the NSPS for PM in 40 CFR Part 60.102.	Continuous opacity monitoring system.	Not applicable	Complying with Table 6 of this subpart.
3. Option 2: PM limit not subject to the NSPS for PM in 40 CFR Part 60.102.	a. Continuous opacity monitoring system.	The opacity of emissions from your catalyst regenerator vent must not exceed the site-specific opacity operating limit established during the performance test	Collecting the hourly average continuous opacity monitoring system data according to § 63.1572; and maintaining each 6-minute average in each 1-hour period at or below the site-specific limit.
	b. Continuous parameter monitoring systems—electrostatic precipitator.	i. The daily average gas flow rate to the control device must not exceed the operating limit established during the performance test.	Collecting the hourly and daily average gas flow rate monitoring data according to § 63.1572 1; and maintaining the daily average gas flow rate at limit or below the established during the performance test.
		ii. The daily average voltage and secondary current (or total power input) to the control device must not fall below the operating limit established during the performance test	Collecting the hourly and daily average voltage and secondary current (or total power input) monitoring data according to § 63.1572; and maintaining the daily average voltage and secondary current (or total power input) at or above the limit established during the performance test.
	c. Continuous parameter monitoring systems—wet scrubber.	i. The daily average pressure drop across the scrubber must not fall below the operating limit	

		established during the performance test. ii. The daily average liquid-to-gas ratio must not fall below the operating limit established during the performance test.	Collecting the hourly and daily average pressure drop monitoring data according to § 63.1572; and maintaining the daily average press drop above the limit established during the performance test. Collecting the hourly average gas flow rate and water (or scrubbing liquid) flow rate monitoring data according to § 63.1572[1]; determining and recording the hourly average liquid-to-gas ratio; determining and recording the daily average liquid-to-gas ratio; and maintaining the daily average liquid-to-gas ratio above the limit established during the performance test.
(Continued on next page)			

(Cont.) TABLE 7 TO Subpart UUU OF PART 63.—CONTINUOUS COMPLIANCE WITH OPERATING LIMITS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS
[As stated in § 63.1564(c)(1), you must meet each requirement in the following table that applies to you]

For each new or existing catalytic cracking unit * * *	If you use * * *	For this operating limit * * *	You must demonstrate continuous compliance by * * *
4. Option 3: Ni lb/hr not subject to the NSPS for PM in 40 CFR Part 60.102.	a. Continuous opacity monitoring system.	The daily average Ni operating value must not exceed the site-specific Ni operating limit established during the performance test.	Collecting the hourly average continuous opacity monitoring system data according § 63.1572; determining and recording equilibrium catalyst Ni concentration at least once a week collecting the hourly average gas flow rate monitoring data according to § 63.1572[1]; determining and recording the hourly average Ni operating value using Equation 11 of § 63.1564; determining and recording the daily average Ni operating value; and maintaining the daily average Ni operating value below the site-specific Ni operating limit established the performance test.
	b. Continuous parameter monitoring systems—electrostatic precipitator.	i. The daily average gas flow rate to the control device must notice exceed the level established in the performance test.	See item 3.b.i. of this table.
		ii. The daily average voltage and secondary current (or total power input) must not fall below the level established in the performance test.	See item 3.b.ii. of this table.
		iii. The monthly rolling average of equilibrium catalyst Ni concentration must not exceed the level established during the	Determining the recording the

		performance test.	equilibrium catalyst Ni concentration at least once a week; determining and recording the monthly rolling average of the equilibrium catalyst Ni concentration once each week using the weekly or most recent value; and maintaining the monthly rolling average below the limit established in the performance test
	c. Continuous parameter monitoring systems—wet scrubber.	i. The daily average pressure drop must not fall below the operating limit established in the performance test.	See item 3.c.i. of this table.
		ii. The daily average liquid-to-gas ratio must not fall below the operating limit established during the performance test.	See item 3.c.ii. of this table.
		iii. The monthly rolling average equilibrium catalyst Ni concentration must not exceed the level established during the performance test.	Determining and recording the equilibrium catalyst Ni concentration at least once a week; determining and recording the monthly rolling average of equilibrium catalyst Ni concentration once each week using the weekly or most recent value; and maintaining the monthly rolling average below the limit established in the performance test.
(Continued on next page)			

(Cont.) TABLE 7 TO Subpart UUU OF PART 63.—CONTINUOUS COMPLIANCE WITH OPERATING LIMITS FOR METAL HAP EMISSIONS FROM CATALYTIC CRACKING UNITS
[As stated in § 63.1564(c)(1), you must meet each requirement in the following table that applies to you

For each new or existing catalytic cracking unit * * *	If you use * * *	For this operating limit * * *	You must demonstrate continuous compliance by * * *
5. Option 4: Ni lb/ton of coke burnoff not subject to the NSPS for PM in 40 CFR Part 60.102	a. Continuous opacity monitoring system.	The daily average Ni operating value must not exceed the site specific Ni operating limit established during the performance test.	Collecting the hourly average continuous opacity monitoring system data according to § 63.1572; collecting the hourly average gas flow rate monitoring data according to § 63.1572 1; determining and recording equilibrium catalyst Ni concentration at least once a week; determining and recording the hourly average Ni operating value using Equation 12 of § 63.1564; determining and recording the daily average Ni operating value; and maintaining the daily average Ni operating value below the site-specific Ni operating limit established during the performance test.
	b. Continuous parameter monitoring systems—electrostatic precipitator.	i. The daily average gas flow rate to the control device must not exceed the level established in the performance test.	See item 3.b.i. of this table.
		ii. The daily average voltage and secondary current (or total power input) must not fall below the level	See item 3.b.ii. of this table.

		established in the performance test.	
		iii. The monthly rolling average equilibrium catalyst Ni concentration must not exceed the level established during the performance test.	See item 4.b.iii. of this table.
	c. Continuous parameter monitoring systems—wet scrubber.	i. The daily average pressure drop must not fall below the operating limit established in the performance test.	See item 3.c.i. of this table.
		ii. The daily average liquid-to-gas ratio must not fall below the operating limit established during the performance test. See item 3.c.ii. of this table.	
		iii. The monthly rolling average equilibrium catalyst Ni concentration must not exceed the level established during the performance test.	See item 4.c.iii. of this table.

1 If applicable, you can use the alternative in § 63.1573 for gas flow rate instead of a continuous parameter monitoring system if you used the alternative method in the initial performance test. If so, you must continuously monitor and record the air flow rate to the regenerator and the temperature of the gases entering the control device as described in § 63.1573. You must determine and record the hourly average gas flow rate using Equation 1 of § 63.1573 and the daily average gas flow rate. You must maintain the daily average gas flow rate below the operating limit established during the performance test.

TABLE 8 TO Subpart UUU OF PART 63.—ORGANIC HAP EMISSION LIMITS FOR CATALYTIC CRACKING UNITS

[As stated in § 63.1565(a)(1), you must meet each emission limitation in the following table that applies to you]

For each new and existing catalytic cracking unit * * *	You must meet the following emission limit for each catalyst regenerator vent * * *
1. Subject to the NSPS for carbon monoxide (CO) in 40 CFR Part 60.103.	CO emissions from the catalyst regenerator vent or CO boiler serving the catalytic cracking unit must not exceed 500 parts per million volume (ppmv) (dry basis).
2. Not subject to the NSPS for CO in 40 CFR 60.103.	a. CO emissions from the catalyst regenerator vent or CO boiler serving the catalytic cracking unit must not exceed 500 ppmv (dry basis). b. If you use a flare to meet the CO limit, the flare must meet the requirements for control devices in § 63.11(b): visible emissions must not exceed a total of 5 minutes during any 2 consecutive hours.

TABLE 9 TO Subpart UUU OF PART 63.—OPERATING LIMITS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC CRACKING UNITS

[As stated in § 63.1565(a)(2), you must meet each operating limit in the following table that applies to you]

For each new or existing catalytic cracking unit * * *	For this type of continuous monitoring system * * *	For this type of control device * * *	You must meet this operating limit * * *

1. Subject to the NSPS for carbon monoxide (CO) in 40 CFR Part 60.103.	Continuous emission monitoring system.	Not applicable	Not applicable.
2. Not subject to the NSPS for CO in 40 CFR Part 60.103.	a. Continuous emission monitoring system.	Not applicable	Not applicable.
	b. Continuous parameter monitoring systems.	i. Thermal incinerator	Maintain the daily average combustion zone temperature above the limit established during the performance test; and maintain the daily average oxygen concentration in the vent stream (percent, dry basis) above the limit established during the performance test.
		ii. Boiler or process heater with a design heat input capacity under 44 MW or a boiler or process heater in which all vent streams are not introduced into the flame zone.	Maintain the daily average combustion zone temperature above the limit established in the performance test.
		iii. Flare	The flare pilot light must be present at all times and the flare must be operating at all times that emissions may be vented to it.

TABLE 10 TO Subpart UUU OF PART 63.—CONTINUOUS MONITORING SYSTEMS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC CRACKING UNITS—Continued

[As stated in § 63.1565(b)(1), you must meet each requirement in the following table that applies to you]

For each new or existing catalytic cracking unit * * *	And you use this type of control device for your vent * * *	You must install, operate, and maintain this type of continuous monitoring system * * *
1. Subject to the NSPS for carbon monoxide (CO) in 40 CFR Part 60.103.	Not applicable	Continuous emission monitoring system to measure and record the concentration by volume (dry basis) of CO emissions from each catalyst regenerator vent.
2. Not subject to the NSPS for CO in 40 CFR 60.103.	a. Thermal incinerator	Continuous emission monitoring system to measure and record the concentration by volume (dry basis) of CO emissions from each catalyst regenerator vent; or continuous parameter monitoring systems to measure and record the combustion zone temperature and oxygen content (percent, dry basis) in the incinerator vent stream.
	b. Process heater or boiler with a design heat input capacity under 44 MW or process heater or boiler in which all vent streams are not introduced into the flame zone.	Continuous emission monitoring system to measure and record the concentration by volume (dry basis) of CO emissions from each catalyst regenerator vent; or continuous parameter monitoring systems to measure and record the combustion zone temperature.
	c. Flare	Monitoring device such as a thermocouple, an ultraviolet beam sensor, or infrared sensor to continuously detect the presence of a

	d. No control device	pilot flame. Continuous emission monitoring system to measure and record the concentration by volume (dry basis) of CO emissions from each catalyst regenerator vent.

TABLE 11 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC CRACKING UNITS NOT SUBJECT TO NEW Emissions unit PERFORMANCE STANDARD (NSPS) FOR CARBON MONOXIDE (CO)

[As stated in § 63.1565(b)(2) and (3), you must meet each requirement in the following table that applies to you]

For * * *	You must * * *	Using * * *	According to these requirements* *
1. Each new or existing catalytic cracking unit catalyst regenerator vent.	a. Select sampling port's location and the number of traverse ports.	Method 1 or 1A in Appendix A to part 60 of this chapter.	Sampling sites must be located at the outlet of the control device or the outlet of the regenerator, as applicable, and prior to any releases to the atmosphere.
	b. Determine velocity and volumetric flow rate.	Method 2, 2A, 2D, 2F, or 2G in Appendix A to part 60 of this chapter, as applicable.	
	c. Conduct gas molecular weight analysis.	Method 3, 3A, or 3B in appendix A to part 60 of this chapter, as applicable.	
	d. Measure moisture content of the stack gas.	Method 4 in Appendix A to part 60 of this chapter.	
2. For each new or existing catalytic cracking unit catalyst regenerator vent if you use a continuous emission monitoring system.	Measure CO emissions	Data from your continuous emission monitoring system.	Collect CO monitoring data for each vent for 24 consecutive operating hours; and reduce the continuous emission monitoring data to 1-hour averages computed from four or more data points equally spaced over each 1-hour period.
3. Each catalytic cracking unit catalyst regenerator vent if you use continuous parameter monitoring systems.	a. Measure the CO concentration (dry basis) of emissions exiting the control device.	Method 10, 10A, or 10B in appendix A to part 60 of this chapter, as applicable.	
	b. Establish each operating limit in Table 9 of this subpart that applies to you.	Data from the continuous parameter monitoring systems.	
	c. Thermal incinerator combustion zone temperature.	Data from the continuous parameter monitoring systems.	Collect temperature monitoring data every 15 minutes during the entire period of the CO initial performance test; and determine and record the minimum hourly average combustion zone temperature from all the readings.
	d. Thermal incinerator: oxygen, content (percent, dry basis) in the incinerator vent stream.	Data from the continuous parameter monitoring systems.	Collect oxygen concentration (percent, dry basis) monitoring data every 15 minutes during
	e. If you use a process heater or boiler with a design heat input capacity under 44 MW or process		

(Continued on next page)	heater or boiler in which all vent streams are not introduced into the flame zone, establish operating limit for combustion zone temperature. e. If you use a process heater or boiler with a design heat input capacity under 44 MW or process heater or boiler in which all vent streams are not introduced into the flame zone, establish operating limit for combustion zone temperature.	Data from the continuous parameter monitoring systems.	the entire period of the CO initial performance test; and determine and record the minimum hourly average percent excess oxygen concentration from all the readings. Collect the temperature monitoring data every 15 minutes during the entire period of the CO initial performance test; and determine and record the minimum hourly average combustion zone temperature from all the readings.

(Continued) TABLE 11 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC CRACKING UNITS NOT SUBJECT TO NEW Emissions unit PERFORMANCE STANDARD (NSPS) FOR CARBON MONOXIDE (CO)

[As stated in § 63.1565(b)(2) and (3), you must meet each requirement in the following table that applies to you]

For * * *	You must * * *	Using * * *	According to these requirements * * *
	f. If you use a flare, conduct visible emission observations. g. If you use a flare, determine that the flare meets the requirements for net heating value of the gas being combusted and exit velocity.	Method 22 (40 CFR Part 60, appendix A). 40 CFR Part 60.11(b)(6)through(8).	Maintain a 2-hour observation period; and record the presence of a flame at the pilot light over the full period of the test.

TABLE 12 TO Subpart UUU OF PART 63.—INITIAL COMPLIANCE WITH ORGANIC HAP EMISSION LIMITS FOR CATALYTIC CRACKING UNITS

[As stated in § 63.1565(b)(4), you must meet each requirement in the following table that applies to you]

For each new and existing catalytic cracking unit * * *	For the following emission limit * * *	You have demonstrated initial compliance if * * *
1. Subject to the NSPS for carbon monoxide (CO) in 40 CFR Part 60.103.	CO emissions from your catalyst regenerator vent or CO boiler serving the catalytic cracking unit must not exceed 500 ppmv (dry basis).	You have already conducted a performance test to demonstrate initial compliance with the NSPS and the measured CO emissions are less than or equal to 500 ppm (dry basis). As part of the Notification of Compliance Status, you must certify that your vent meets the CO limit. You are not required to conduct another performance test to demonstrate initial compliance. You have already conducted a performance evaluation to demonstrate initial compliance with the applicable performance specification. As part of your Notification of Compliance Status, you must certify that your continuous

2. Not subject to the NSPS for CO in 40 CFR 60.103.	a. CO emissions from your catalyst regenerator vent or CO boiler serving the catalytic cracking unit must not exceed 500 ppmv (dry basis). b. If you use a flare, visible emissions must not exceed a total of 5 minutes during any 2 operating hours.	emission monitoring system meets the applicable requirements in § 63.1572. You are not required to conduct another performance evaluation to demonstrate initial compliance. i. If you use a continuous parameter monitoring system, the average CO emissions measured by Method 10 over the period of the initial performance test are less than or equal to 500 ppmv (dry basis). ii. If you use a continuous emission monitoring system, the hourly average CO emissions over the 24-hour period for the initial performance test are not more than 500 ppmv (dry basis); and your performance evaluation shows your continuous emission monitoring system meets the applicable requirements in § 63.1572. Visible emissions, measured by Method 22 during the 2-hour observation period during the initial performance test, are no higher than 5 minutes.

TABLE 13 TO Subpart UUU OF PART 63—CONTINUOUS COMPLIANCE WITH ORGANIC HAP EMISSION LIMITS FOR CATALYTIC CRACKING UNITS

[As stated in § 63.1565(c)(1), you must meet each requirement in the following table that applies to you]

For each new and existing catalytic cracking unit * * ;*	Subject to this emission limit for your catalyst regenerator vent * * *	If you must * * *	You must demonstrate continuous compliance by * * *
1. Subject to the NSPS for carbon monoxide (CO) in 40 CFR Part 60.103.	CO emissions from your catalyst regenerator vent or CO boiler serving the catalytic cracking unit must not exceed 500 ppmv (dry basis).	Continuous emission monitoring system.	Collecting the hourly average CO monitoring data according to § 63.1572; and maintaining the hourly average CO concentration at or below 500 ppmv (dry basis).
2. Not subject to the NSPS for CO in 40 CFR Part 60.103.	i. CO emissions from your catalyst regenerator vent or CO boiler serving the catalytic cracking unit must not exceed 500 ppmv (dry basis).	Continuous emission monitoring system.	Same as above.
	ii. CO emissions from your catalyst regenerator vent or CO boiler serving the catalytic cracking unit must not exceed 500 ppmv (dry basis).	Continuous parameter monitoring system.	Maintaining the hourly average CO concentration below 500 ppmv (dry basis).
	iii. Visible emissions from a flare must not exceed a total of 5 minutes during any 2-hour period.	Control device-flare	Maintaining visible emissions below a total of 5 minutes during any 2-hour operating period.

TABLE 14 TO Subpart UUU OF PART 63—CONTINUOUS COMPLIANCE WITH OPERATING LIMITS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC CRACKING UNITS

[As stated in § 63.1565(c)(1), you must meet each requirement in the following table that applies to you]

For each new existing catalytic cracking unit * * *	If you use * * *	For this operating limit * * *	You must demonstrate continuous compliance by * * *
1. Subject to NSPS for carbon monoxide (CO) in 40 CFR Part 60.103.	Continuous emission monitoring system.	Not applicable	Complying with Table 13 of this subpart.
2. Not subject to the NSPS for CO in 40 CFR Part 60.103.	a. Continuous emission monitoring system.	Not applicable	Complying with Table 13 of this subpart.
	b. Continuous parameter monitoring systems—thermal incinerator.	i. The daily average combustion zone temperature must not fall below the level established during the performance test.	Collecting the hourly and daily average temperature monitoring data according to § 63.1572; and maintaining the daily average combustion zone temperature above the limit established during the performance test.
		ii. The daily average oxygen concentration in the vent stream (percent, dry basis) must not fall below the level established during the performance test.	Collecting the hourly and daily average oxygen concentration monitoring data according to § 63.1572; and maintaining the daily average oxygen concentration above the limit established during the performance test.
	c. Continuous parameter monitoring systems—boiler or process heater with a design heat input capacity under 44 MW or boiler or process heater in which all vent streams are not introduced into the flame zone.	The daily combustion zone temperature must not fall below the level established in the performance test.	Collecting the average hourly and daily temperature monitoring data according to § 63.1572; and maintaining the daily average combustion zone temperature above the limit established during the performance test.
	d. Continuous parameter monitoring system—flare.	The flare pilot light must be present at all times and the flare must be operating at all times that emissions may be vented to it.	Collecting the flare monitoring data according to § 63.1572; and recording for each 1-hour period whether the monitor was continuously operating and the pilot light was continuously present during each 1-hour period.

TABLE 36 TO Subpart UUU OF PART 63.—WORK PRACTICE STANDARDS FOR HAP EMISSIONS FROM BYPASS LINES

[As stated in § 63.1569(a)(1), you must meet each work practice standard in the following table that applies to you]

Option	You must meet one of these equipment standards * * *

1. Option 1	Install and operate a device (including a flow indicator, level recorder, or electronic valve position monitor) to continuously detect, at least every hour, whether flow is present in the bypass line. Install the device at or as near as practical to the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere.
2. Option 2	Install a car-seal or lock-and-key device placed on the mechanism by which the bypass device flow position is controlled (e.g., valve handle, damper level) when the bypass device is in the closed position such that the bypass line valve cannot be opened without breaking the seal or removing the device.
3. Option 3	Seal the bypass line by installing a solid blind between piping flanges.
4. Option 4	Vent the bypass line to a control device that meets the appropriate requirements in this subpart.

TABLE 37 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS FOR BYPASS LINES

[As stated in § 63.1569(b)(1), you must meet each requirement in the following table that applies to you]

For this standard . . .	You must . . .
1. Option 1: Install and operate a flow indicator, level recorder, or electronic valve position monitor.	Record during the performance test for each type of control device whether the flow indicator, level recorder, or electronic valve position monitor was operating and whether flow was detected at any time during each hour of level the three runs comprising the performance test.

TABLE 38 TO Subpart UUU OF PART 63.—INITIAL COMPLIANCE WITH WORK PRACTICE STANDARDS FOR HAP EMISSIONS FROM BYPASS LINES

[As stated in § 63.1569(b)(2), you must meet each requirement in the following table that applies to you]

For * * *	For this work practice standard * * *	You have demonstrated initial compliance if * * *
1. Each new or existing bypass line associated with a catalytic cracking unit, catalytic reforming unit, or sulfur recovery unit.	a. Option 1: Install and operate a device (including a flow indicator, level recorder, or electronic valve position monitor) to continuously detect, at least every hour, whether flow is present in the bypass line. Install the device at or as near as practical to the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere.	The installed equipment operates properly during each run of the performance test and no flow is present in the line during the test.
	b. Option 2: Install a car-seal or lock-and-key device placed on the mechanism by which the bypass device flow position is controlled (e.g., valve handle, damper level) when the bypass device is in the closed position such that the bypass line valve cannot be opened without breaking the seal or removing the device.	As part of the notification of compliance status, you certify that you installed the equipment, the equipment was operational by your compliance date, and you identify what equipment was installed.
	c. Option 3: Seal the bypass line by installing a solid blind between piping flanges.	See item 1.b. of this table.
	d. Option 4: Vent the bypass line to a control device that meets the appropriate requirements in this subpart.	See item 1.b. of this table.

TABLE 39 TO Subpart UUU OF PART 63.—CONTINUOUS COMPLIANCE WITH WORK PRACTICE STANDARDS FOR HAP EMISSIONS FROM BYPASS LINES

[As stated in § 63.1569(c)(1), you must meet each requirement in the following table that applies to you]

If you elect this standard * * *	You must demonstrate continuous compliance by * * *
1. Option 1: Flow indicator, level recorder, or electronic valve position monitor.	Continuously monitoring and recording whether flow is present in the bypass line; visually inspecting the device at least once every hour if the device is not equipped with a recording system that provides a continuous record; and recording whether the device is operating properly and whether flow is present in the bypass line.
2. Option 2: Car-seal or lock-and-key device	Visually inspecting the seal or closure mechanism at least once every month; and recording whether the bypass line valve is maintained in the closed position and whether flow is present in the line.
3. Option 3: Solid blind flange	Visually inspecting the blind at least once a month; and recording whether the blind is maintained in the correct position such that the vent stream cannot be diverted through the bypass line.
4. Option 4: Vent to control device	Monitoring the control device according to appropriate subpart requirements.
5. Option 1, 2, 3, or 4	Recording and reporting the time and duration of any bypass.

TABLE 40 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR INSTALLATION, OPERATION, AND MAINTENANCE OF CONTINUOUS OPACITY MONITORING SYSTEMS AND CONTINUOUS EMISSION MONITORING SYSTEMS

[As stated in § 63.1572(a)(1) and (b)(1), you must meet each requirement in the following table that applies to you]

This type of continuous opacity or emission monitoring system * * *	Must meet these requirements * * *
1. Continuous opacity monitoring system	Performance specification 1 (40 CFR Part 60, appendix B).
2. CO continuous emission monitoring system	Performance specification 4 (40 CFR Part 60, appendix B); span value of 1,000 ppm; and procedure 1 (40 CFR Part 60, Appendix F) except relative accuracy test audits are required annually instead of quarterly.
3. CO continuous emission monitoring system used to demonstrate emissions average under 50 ppm (dry basis).	Performance specification 4 (40 CFR Part 60, appendix B); and span value of 100 ppm.
4. SO_2 continuous emission monitoring for sulfur recovery unit with oxidation control system or reduction control system; this monitor must include an O_2 monitor for correcting the data for excess air.	Performance specification 2 (40 CFR Part 60, appendix B); span values of 500 ppm SO_2 and 10 percent O_2; use Methods 6 or 6C and 3A or 3B (40 CFR Part 60, Appendix A) for certifying O_2 monitor; and procedure 1 (40 CFR Part 60, Appendix F) except relative accuracy test audits are required annually instead of quarterly.
5. Reduced sulfur and O_2 continuous emission monitoring system for sulfur recovery unit with reduction control system not followed by incineration; this monitor must include an O_2 monitor for correcting the data for excess air unless exempted.	Performance specification 5 (40 CFR Part 60, appendix B), except calibration drift specification is 2.5 percent of the span value instead of 5 percent; 450 ppm reduced sulfur and 10 percent O_2; use Methods 15 or 15A and 3A or 3B (40 CFR Part 60, Appendix A) for certifying O_2 monitor; if Method 3A or 3B yields O_2 concentrations below 0.25 percent during the performance evaluation, the O_2 concentration can be assumed to be zero and the O_2 monitor is not required; and procedure 1 (40 CFR Part 60, Appendix F), except relative accuracy test audits, are required annually instead of quarterly.
6. Instrument with an air or O2 dilution and oxidation system to convert reduced sulfur to SO_2 for continuously monitoring the concentration of SO_2 instead of reduced sulfur monitor and O_2 monitor.	Performance specification 5 (40 CFR Part 60, appendix B); span value of 375 ppm SO_2 and 10 percent O_2; use Methods 15 or 15A and 3A or 3B for certifying O_2 monitor; and procedure 1 (40 CFR Part 60, Appendix F), except relative accuracy test audits, are required annually instead of quarterly.
7. TRS continuous emission monitoring system for sulfur recovery unit; this monitor must include an O_2 monitor for correcting the data for excess air.	Performance specification 5 (40 CFR Part 60, appendix B).
8. O_2 monitor for oxygen concentration	If necessary due to interferences, locate the oxygen sensor prior to the introduction of any outside gas stream; performance specification 3 (40 CFR Part 60, appendix B; span value for O_2 sensor is 10 percent; and procedure 1 (40 CFR Part 60, Appendix F), except relative accuracy test audits, are required annually instead of quarterly.

TABLE 41 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR INSTALLATION, OPERATION, AND MAINTENANCE OF CONTINUOUS PARAMETER MONITORING SYSTEMS—Continued

[As stated in § 63.1572(c)(1), you must meet each requirement in the following table that applies to you]

If you use a continuous parameter monitoring system to measure and record * * *	You must * * *
1. Voltage and secondary current or total power input.	At least monthly, inspect all components of the continuous parameter monitoring system for integrity and all electrical connections for continuity; and record the results of each inspection.
2. Pressure drop [1]	Locate the pressure sensor(s) in a position that provides a representative measurement of the pressure; minimize or eliminate pulsating pressure, vibration, and internal and external corrosion; use a gauge with an accuracy ± 2 percent over the operating range; check pressure tap for plugs at least once a week; using a manometer, check gauge calibration quarterly and transducer calibration monthly; for a semi-regenerative catalytic reforming unit, you can

	check the calibration quarterly and monthly or prior to regeneration, whichever is longer; record the results of each calibration; conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range, or install a new pressure sensor; at least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage; and record the results of each inspection.
3. Air flow rate, gas flow rate, or total water (or scrubbing liquid) flow rate.	Locate the flow sensor(s) and other necessary equipment such as straightening vanes in a position that provides representative flow; use a flow rate sensor with an accuracy within ±5 percent; reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances; conduct a flow sensor calibration check at least semiannually; for a semi-regenerative catalytic reforming unit, you can check the calibration at least semiannually or prior to regeneration, whichever is longer; record the results of each calibration; if you elect to comply with Option 3 (Ni lb/hr) or Option 4 (Ni lb/1,000 lbs of coke burn-off) for the HAP metal emission limitations in § 63.1564, install the continuous parameter monitoring system for gas flow rate as close as practical to the continuous opacity monitoring system; and if you don't use a continuous opacity monitoring system, install the continuous parameter monitoring system for gas flow rate as close as practical to the control device.
4. Combustion zone temperature	Install the temperature sensor in the combustion zone or in the ductwork immediately downstream of the combustion zone before any substantial heat exchange occurs; locate the temperature sensor in a position that provides a representative temperature; use a temperature sensor with an accuracy of ±1 percent of the temperature being measured, expressed in degrees Celsius (C) or ±0.5 degrees C, whichever is greater; shield the temperature sensor system from electromagnetic interference and chemical contaminants; if you use a chart recorder, it must have a sensitivity in the minor division of at least 20 degrees Fahrenheit; perform an electronic calibration at least semiannually according to the procedures in the manufacturer's owners manual; following the electronic calibration, conduct a temperature sensor validation check, in which a second or redundant temperature sensor placed nearby the process temperature sensor must yield a reading within 16.7 degrees C of the process temperature sensor's reading; record the results of each calibration and validation check; conduct calibration and validation checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range, or install a new temperature sensor; and at least monthly, inspect all components for integrity and all electrical connections for continuity, oxidation, and galvanic corrosion.
5. pH	Locate the pH sensor in a position that provides a representative measurement of pH; ensure the sample is properly mixed and representative of the fluid to be measured; check the pH meter's calibration on at least two points every 8 hours of process operation; at least monthly, inspect all components for integrity and all electrical components for continuity; record the results of each inspection; and if you use pH strips to measure the pH of the water exiting a wet scrubber as an alternative to a continuous parameter monitoring system, you must use pH strips with an accuracy of ±10 percent.
6. HCl concentration	Use a colormetric tube sampling system with a printed numerical scale in ppmv, a standard measurement range of 1 to 10 ppmv (or 1 to 30 ppmv if applicable), and a standard deviation for measured values of no more than ±15 percent. System must include a gas detection pump and hot air probe if needed for the measurement range.

TABLE 42 TO Subpart UUU OF PART 63.—ADDITIONAL INFORMATION FOR INITIAL NOTIFICATION OF COMPLIANCE STATUS

[As stated in § 63.1574(d), you must meet each requirement in the following table that applies to you]

For * * *	You must provide this additional information * * *
1. Identification of affected emissions units and emission points.	Nature, size, design, method of operation, operating design capacity of each affected emissions unit; identify each emission point for each HAP; identify any affected emissions unit or vent associated with an affected emissions unit not subject to the requirements of Subpart UUU.
2. Initial compliance	Identification of each emission limitation you will meet for each affected emissions unit, including any option you select (i.e., NSPS, PM or Ni, flare, percent reduction, concentration, options for bypass lines); if applicable, certification that you have already conducted a performance test to demonstrate initial compliance with the NSPS for an affected emissions unit; certification that the

3. Continuous compliance	vents meet the applicable emission limit and the continuous opacity or that the emission monitoring system meets the applicable performance specification; if applicable, certification that you have installed and verified the operational status of equipment by your compliance date for each bypass line that meets the requirements of Option 2, 3, or 4 in § 63.1569 and what equipment you installed; identification of the operating limit for each affected emissions unit, including supporting documentation; if your affected emissions unit is subject to the NSPS, certification of compliance with NSPS emission limitations and performance specifications; a brief description of performance test conditions (capacity, feed quality, catalyst, etc.); an engineering assessment (if applicable); and if applicable, the flare design (e.g., steam-assisted, air-assisted, or non-assisted), all visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the Method 22 test. Each monitoring option you elect; and identification of any unit or vent for which monitoring is not required; and the definition of ‘‘operating day.’’ (This definition, subject to approval by the applicable permitting authority, must specify the times at which a 24-hr operating day begins and ends.)

TABLE 43 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR REPORTS

[As stated in § 63.1575(a), you must meet each requirement in the following table that applies to you]

You must submit a(n) * * *	The report must contain * * *	You must submit the report * * *
1. Compliance report	If there are not deviations from any emission limitation or work practice standard that applies to you, a statement that there were no deviations from the standards during the reporting period and that no continuous opacity monitoring system or continuous emission monitoring system was inoperative, inactive, out-of-control, repaired, or adjusted; and if you have a deviation from any emission limitation or work practice standard during the reporting period, the report must contain the information in § 63.1575(d) or (e)	Semiannually according to the requirements in § 63.1575(b).

Table 44 to Subpart UUU of Part 63 - Applicability of NESHAP General Provisions to Subpart UUU
As stated in §63.1577, you must meet each requirement in the following table that applies to you.

Citation	Subject	Applies to Subpart UUU	Explanation
§63.1	Applicability	Yes	Except that Subpart UUU specifies calendar or operating day.
§63.2	Definitions	Yes	
§63.3	Units and Abbreviations	Yes	
§63.4	Prohibited Activities	Yes	
§63.5(a)-(c)	Construction and Reconstruction	Yes	In §63.5(b)(4), replace the reference to §63.9 with §63.9(b)(4) and (5).
§63.5(d)(1)(i)	Application for Approval of Construction or Reconstruction - General Application Requirements	Yes	Except, Subpart UUU specifies the application is submitted as soon as practicable before startup but no later than 90 days (rather than 60) after the promulgation date where construction or reconstruction had commenced and initial startup had not occurred before promulgation.
§63.5(d)(1)(ii)		Yes	Except that emission estimates specified in §63.5(d)(1)(ii)(H) are not required.
§63.5(d)(1)(iii)		No	Subpart UUU specifies submission of notification of compliance status.
§63.5(d)(2)		No	
§63.5(d)(3)		Yes	Except that §63.5(d)(3)(ii) does not apply.
§63.5(d)(4)		Yes	
§63.5(e)	Approval of Construction or Reconstruction	Yes	
§63.5(f)(1)	Approval of Construction or Reconstruction Based on State Review	Yes	
§63.5(f)(2)		Yes	Except that 60 days is changed to 90 days and cross-reference to §63.9(b)(2) does not apply.
§63.6(a)	Compliance with Standards and Maintenance - Applicability	Yes	
§63.6(b)(1)-(4)	Compliance Dates for New and Reconstructed Emissions units	Yes	
§63.6(b)(5)		Yes	Except that Subpart UUU specifies different compliance dates for emissions units.
§63.6(b)(6)	[Reserved]	Not appli-cable	

§63.6(b)(7)	Compliance Dates for New and Reconstructed Area Emissions units That Become Major	Yes	
§63.6(c)(1)-(2)	Compliance Dates for Existing Emissions units	Yes	Except that Subpart UUU specifies different compliance dates for emissions units subject to Tier II gasoline sulfur control requirements.
§63.6(c)(3)-(4)	[Reserved]	Not appli-cable	
§63.6(c)(5)	Compliance Dates for Existing Area Emissions units That Become Major	Yes	
§63.6(d)	[Reserved]	Not appli-cable	
§63.6(e)(1)-(2)	Operation and Maintenance Requirements	Yes	
§63.6(e)(3)(i)-(iii)	Startup, Shutdown, and Malfunction Plan	Yes	
§63.6(e)(3)(iv)		Yes	Except that reports of actions not consistent with plan are not required within 2 and 7 days of action but rather must be included in next periodic report.
§63.6(e)(3)(v)-(viii)		Yes	The owner or operator is only required to keep the latest version of the plan.
§63.6(f)(1)-(2)(iii)(C)	Compliance with Emission Standards	Yes	
§63.6(f)(2)(iii)(D)		No	
§63.6(f)(2)(iv)-(v)		Yes	
§63.6(f)(3)		Yes	
§63.6(g)	Alternative Standard	Yes	
§63.6(h)	Opacity/VE Standards	Yes	
§63.6(h)(2)(i)	Determining Compliance with Opacity/VE Standards	No	Subpart UUU specifies methods.
§63.6(h)(2)(ii)	[Reserved]	Not appli-cable	
§63.6(h)(2)(iii)		Yes	
§63.6(h)(3)	[Reserved]	Not appli-cable	
§63.6(h)(4)	Notification of Opacity/VE Observation Date	Yes	Applies to Method 22 tests.
§63.6(h)(5)	Conducting Opacity/VE Observations	No	
§63.6(h)(6)	Records of Conditions During Opacity/VE Observations	Yes	Applies to Method 22 observations.

§63.6(h)(7)(i)	Report COM Monitoring Data from Performance Test	Yes	
§63.6(h)(7)(ii)	Using COM Instead of Method 9	No	
§63.6(h)(7)(iii)	Averaging Time for COM during Performance Test	Yes	
§63.6(h)(7)(iv)	COM Requirements	Yes	
§63.6(h)(8)	Determining Compliance with Opacity/VE Standards	Yes	
§63.6(h)(9)	Adjusted Opacity Standard	Yes	
§63.6(i)(1)-(14)	Extension of Compliance	Yes	Not applicable to an affected emissions unit with Tier II compliance date. May be applicable to an affected emissions unit exempt from Tier II rule.
§63.6(i)(15)	[Reserved]	Not appli-cable	
§63.6(i)(16)		Yes	
§63.6(j)	Presidential Compliance Exemption	Yes	
§63.7(a)(1)	Performance Test Requirements-Applicability	Yes	Except that Subpart UUU specifies the applicable test and demonstration procedures.
§63.7(a)(2)	Performance Test Dates	No	Test results must be submitted in the Notification of Compliance Status report due 150 days after the compliance date.
§63.7(a)(3)	Section 114 Authority	Yes	
§63.7(b)	Notifications	Yes	Except that Subpart UUU specifies notification at least 30 days prior to the scheduled test date rather than 60 days.
§63.7(c)	Quality Assurance Program/Site-Specific Test Plan	Yes	
§63.7(d)	Performance Test Facilities	Yes	
§63.7(e)	Conduct of Tests	Yes	
§63.7(f)	Alternative Test Method	Yes	
§63.7(g)	Data Analysis, Record keeping, Reporting	Yes	Except performance test reports must be submitted with notification of compliance status due 150 days after the compliance date.
§63.7(h)	Waiver of Tests	Yes	
§63.8(a)(1)	Monitoring Requirements - Applicability	Yes	
§63.8(a)(2)	Performance Specifications	Yes	
§63.8(a)(3)	[Reserved]	Not appli-cable	

§63.8(a)(4)	Monitoring with Flares	Yes	
§63.8(b)(1)	Conduct of Monitoring	Yes	
§63.8(b)(2)-(3)	Multiple Effluents and Multiple Monitoring Systems	Yes	Subpart UUU specifies the required monitoring locations.
§63.8(c)(1)	Monitoring System Operation and Maintenance	Yes	
§63.8(c)(1)(i)-(ii)	Startup, Shutdown, and Malfunctions	Yes	Except that Subpart UUU specifies that reports are not required if actions are consistent with the SSM plan, unless requested by the permitting authority. If actions are not consistent, actions must be described in next compliance report.
§63.8(c)(1)(iii)	Compliance with Operation and Maintenance Requirements	Yes	
§63.8(c)(2)-(3)	Monitoring System Installation	Yes	Except that Subpart UUU specifies that for continuous parameter monitoring systems, operational status verification includes completion of manufacturer written specifications or installation operation, and calibration of the system or other written procedures that provide adequate assurance that the equipment will monitor accurately.
§63.8(c)(4)	Continuous Monitoring System Requirements	No	Subpart UUU specifies operational requirements.
§63.8(c)(4)(i)-(ii)	Continuous Monitoring System Requirements	Yes	Except that these requirements apply only to a continuous opacity monitoring system or a continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or SO_2 limits.
§63.8(c)(5)	COM Minimum Procedures	Yes	
§63.8(c)(6)	CMS Requirements	No	Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or SO_2 limits.
§63.8(c)(7)-(8)	CMS Requirements	Yes	
§63.8(d)	Quality Control Program	Yes	Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or SO_2 limits.

§63.8(e)	CMS Performance Evaluation	Yes	Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or SO_2 limits. Results are to be submitted as part of the Notification of Compliance Status due 150 days after the compliance date.
§63.8(f)(1)-(5)	Alternative Monitoring Method	Yes	Except that Subpart UUU specifies procedures for requesting alternative monitoring systems and alternative parameters.
§63.8(f)(6)	Alternative to Relative Accuracy Test	Yes	Applicable to continuous emission monitoring systems if performance specification requires a relative accuracy test audit.
§63.8(g)(1)-(4)	Reduction of Monitoring Data	Yes	Applies to a continuous opacity monitoring system or continuous emission monitoring system.
§63.8(g)(5)	Data Reduction	No	Subpart UUU specifies requirements.
§63.9(a)	Notification Requirements - Applicability	Yes	Duplicate Notification of Compliance Status report to the Regional Administrator may be required.
§63.9(b)(1)-(5)	Initial Notifications	Yes	Except that notification of construction or reconstruction is to be submitted as soon as practicable before startup but no later than 30 days (rather than 60 days) after the effective date if construction or reconstruction had commenced but startup had not occurred before the effective date.
§63.9(c)	Request for Extension of Compliance	Yes	
§63.9(d)	New Emissions unit Notification for Special Compliance Requirements	Yes	
§63.9(e)	Notification of Performance Test	Yes	Except that notification is required at least 30 days before test.
§63.9(f)	Notification of VE/Opacity Test	Yes	
§63.9(g)	Additional Notification Requirements for Emissions units with Continuous Monitoring Systems	Yes	Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or SO_2 limits.
§63.9(h)	Notification of Compliance Status	Yes	Except that Subpart UUU specifies the notification is due no later than 150 days after compliance date.

§63.9(i)	Adjustment of Deadlines	Yes	
§63.9(j)	Change in Previous Information	Yes	
§63.10(a)	Record keeping and Reporting-Applicability	Yes	
§63.10(b)	Records	Yes	Except that §63.10(b)(2)(xiii) applies if you use a continuous emission monitoring system to meet the NSPS or you elect to meet the NSPS, CO, or SO_2 reduced sulfur limit and the performance evaluation requires a relative accuracy test audit.
§63.10(c)(1)-(6), (9)-(15)	Additional Records for Continuous Monitoring Systems	Yes	Except that these requirements apply if you use a continuous opacity monitoring system or a continuous emission monitoring system to meet the NSPS or elect to meet the NSPS opacity, CO, or SO_2 limits.
§63.10(c)(7)-(8)	Records of Excess Emissions and Exceedances	No	Subpart UUU specifies requirements.
§63.10(d)(1)	General Reporting Requirements	Yes	
§63.10(d)(2)	Performance Test Results	No	Subpart UUU requires performance test results to be reported as part of the Notification of Compliance Status due 150 days after the compliance date.
§63.10(d)(3)	Opacity or VE Observations	Yes	
§63.10(d)(4)	Progress Reports	Yes	
§63.10(d)(5)(i)	Startup, Shutdown, and Malfunction Reports	Yes	Except that reports are not required if actions are consistent with the SSM plan, unless requested by permitting authority.
§63.10(d)(5)(ii)		Yes	Except that actions taken during a startup, shut- down, or malfunction that are not consistent with the plan do not need to be reported within 2 and 7 days of commencing and completing the action, respectively, but must be included in the next periodic report.
§63.10(e)(1)-(2)	Additional CMS Reports	Yes	Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or SO_2 limits. Reports of performance evaluations must be submitted in Notification of Compliance Status.
§63.10(e)(3)	Excess Emissions/CMS Performance Reports	No	Subpart UUU specifies the applicable requirements.

§63.10(e)(4)	COMS Data Reports	Yes	
§63.10(f)	Record keeping/ Reporting Waiver	Yes	
§63.11	Control Device Requirements	Yes	Applicable to flares.
§63.13	Addresses	Yes	
§63.14	Incorporation by Reference	Yes	
§63.15	Availability of Information	Yes	

c. On August 28, 2001, Marathon Ashland Petroleum, LLC (MAP) and the United States of America entered into a global settlement agreement(Civil NO. 01-40119) entailing several air quality regulations. As part of the settlement, MAP agreed to achieve certain emission limits within specified time periods from its refinery located in Canton, Ohio. In meeting the following commitments, MAP is released from civil liabilities associated with 40 CFR Part 52.21 and 40 CFR Part 60, Subpart J for projects and activities which occurred prior to May 11, 2001.

a. Inject nitrogen oxide (NOx) reducing additives and obtain a new NOx emission limit from the FCCU Regenerator in accordance with Paragraph 12 and Appendix B of the global settlement agreement (GSA).

b. Inject sulfur dioxide (SO2) absorbing catalyst and obtain a new SO2 emission limit from the FCCU Regenerator in accordance with Paragraph 14 and Appendix B of the global settlement agreement (GSA).

c. Comply with the new source performance standards for sulfur dioxide emissions from the FCCU Regenerator by no later than December 31, 2004.

d. Comply with the new source performance standards for particulate matter form the FCCU Regenerator by no later than December 31, 2005.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P002 - Fluidized Catalytic Cracking Unit(FCC). This emissions unit has a rated capacity of 24,500 bbls/day of fresh feed. This emissions unit is subject to the requirements of 40 CFR Part 60, Subpart J, for CO.	OAC rule 3745-18-82(E)(5)	See section B.I.2.a.
	OAC rule 3745-21-09(VV)(1)	The requirements of this rule are less stringent than the requirements of the NSPS (40 CFR Part 60, Subpart J) and the MACT (40 CFR Part 63, Subpart UUU). See section B.I.2.b.

2. Additional Terms and Conditions

2.a The emission limitation specified in 40 CFR Part 52.1881(b)(27)(ix) is the same as the emission limitation specified in OAC rule 3745-18-82(E)(5).

2.b OAC rule 3745-21-09(VV)(1) is not part of the federally approved SIP for ozone. In a submittal dated October 10, 2003, the permittee demonstrated that the requirements of Subpart J are more stringent than the requirements of OAC rule 3745-21-09(VV)(1), i.e., compliance with the requirements of Subpart J results in significantly lower VOC emissions than the requirements of OAC rule 3745-21-09(VV)(1) were designed to achieve (approximately 30 lbs/hr of OC emissions). Therefore, compliance with the requirements of Subpart J will ensure compliance with the VOC emission reductions that would occur as a result of maintaining compliance with OAC rule 3745-21-09(VV)(1), and there is no need for monitoring, record keeping, and reporting requirements for OAC rule 3745-21-09(VV)(1).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
Emissions unit P003 is the north area flare used to control emissions resulting from the emergency relief or malfunction of select emissions units in the MAP facility. The flare is equipped with steam-assisted capability.	40 CFR Part 63, Subpart CC (Refinery MACT)	See section A.I.2.a.
	40 CFR Part 60.18	See section A.I.2.b.
	OAC rule 3745-21-07(J)(3)	See section A.I.2.c.

2. Additional Terms and Conditions

2.a In accordance with 40 CFR Part 63, Subpart CC, the permittee shall employ a flare to control emissions of organic hazardous air pollutants resulting from malfunctions and pressure relief episodes.

2.b This emissions unit shall be designed for and operated with no visible emissions except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

2.c The requirements specified in OAC rule 3745-21-07(J)(3) are less stringent than the requirements specified in 40 CFR Part 60.18.

II. Operational Restrictions

1. The flare shall be operated at all times when emissions are being vented to it.

2. The flare shall be operated with a flame present at all times.

3. Only gases with a net heating value of 11.2 MJ/scm (300 Btu/scf) or greater shall be burned in this emissions unit. Net heating value shall be calculated as specified in 40 CFR Part 60.18(f)(3).

   The flare shall be operated with an exit velocity less than 18.3 m/sec (60 ft/sec) except as specified in sections A.II.4 and A.II.5.

4. If the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1000 Btu/scf), the permittee may operate the flare at an exit velocity equal to or greater than 18.3 m/sec (60 ft/sec), but less than 122 m/sec (400 ft/sec).

5. Steam-assisted flares may be operated with an exit velocity less than the maximum permitted velocity, but not greater than 122 m/sec (400 ft/sec). The maximum permitted velocity shall be determined in accordance with 40 CFR Part 60.18(f)(5).

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain a device to continuously monitor the pilot flame when the emissions unit is in operation. The monitoring device and any recorder shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

   The permittee shall record the following information each day:

   a. all periods during which there was no pilot flame; and

   b. the downtime for the flare and monitoring equipment.

2. The permittee shall continually monitor either visually and/or by camera, whether or not there are visible emissions from the flare. Whenever the permittee observes visible emissions from the flare, the permittee shall monitor the visible emissions for a minimum period of 30 minutes in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 22 and record the results in an operations log. Visible emissions shall be read at a point in the plume immediately after the steam has dissipated.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods during which the pilot flame was not functioning properly. The reports shall include the date, time, and duration of each such period.

2. The permittee shall submit quarterly deviation reports that include visible emission readings conducted pursuant to the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 22 as a result of the presence of visible emissions from the flare and that exceed a

total time of five minutes during any consecutive two hour period. These quarterly deviation 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 limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

   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:

   If required, compliance shall be demonstrated based upon the procedures specified in 40 CFR Part 60, Appendix A, Method 22.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
Emissions unit P004 is the south area flare used to control emissions resulting from the emergency relief or malfunction of select emissions units in the MAP facility. The flare is equipped with steam-assisted capability.	40 CFR Part 63, Subpart CC (Refinery MACT)	See section A.I.2.a.
	40 CFR Part 60.18	See section A.I.2.b.
	OAC rule 3745-21-07(J)(3)	See section A.I.2.c.

2. Additional Terms and Conditions

2.a In accordance with 40 CFR Part 63, Subpart CC, the permittee shall employ a flare to control emissions of organic hazardous air pollutants resulting from malfunctions and pressure relief episodes.

2.b This emissions unit shall be designed for and operated with no visible emissions except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

2.c The requirements specified in OAC rule 3745-21-07(J)(3) are less stringent than the requirements specified in 40 CFR Part 60.18.

II. Operational Restrictions

1. The flare shall be operated at all times when emissions are being vented to it.

2. The flare shall be operated with a flame present at all times.

3. Only gases with a net heating value of 11.2 MJ/scm (300 Btu/scf) or greater shall be burned in this emissions unit. Net heating value shall be calculated as specified in 40 CFR Part 60.18(f)(3).

   The flare shall be operated with an exit velocity less than 18.3 m/sec (60 ft/sec) except as specified in sections A.II.4 and A.II.5.

4. If the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1000 Btu/scf), the permittee may operate the flare at an exit velocity equal to or greater than 18.3 m/sec (60 ft/sec), but less than 122 m/sec (400 ft/sec).

5. Steam-assisted flares may be operated with an exit velocity less than the maximum permitted velocity, but not greater than 122 m/sec (400 ft/sec). The maximum permitted velocity shall be determined in accordance with 40 CFR Part 60.18(f)(5).

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain a device to continuously monitor the pilot flame when the emissions unit is in operation. The monitoring device and any recorder shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

   The permittee shall record the following information each day:

   a. all periods during which there was no pilot flame; and

   b. the downtime for the flare and monitoring equipment.

2. The permittee shall continually monitor either visually and/or by camera, whether or not there are visible emissions from the flare. Whenever the permittee observes visible emissions from the flare, the permittee shall monitor the visible emissions for a minimum period of 30 minutes in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 22 and record the results in an operations log. Visible emissions shall be read at a point in the plume immediately after the steam has dissipated.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods during which the pilot flame was not functioning properly. The reports shall include the date, time, and duration of each such period.

2. The permittee shall submit quarterly deviation reports that include visible emission readings conducted pursuant to the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 22 as a result of the presence of visible emissions from the flare and that exceed a

total time of five minutes during any consecutive two hour period. These quarterly deviation 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 limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

   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:

   If required, compliance shall be demonstrated based upon the procedures specified in 40 CFR Part 60, Appendix A, Method 22.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is an asphalt oxidizer with a thermal afterburner and is designated as emissions unit P007. The asphalt oxidizer process involves blowing air into vacuum bottoms material which oxidizes this material, thereby creating oxidized asphalt. Off gases are burned in the thermal afterburner which utilizes refinery fuel gas, natural gas and/or landfill gas as fuel.	40 CFR Part 63, Subpart CC (Refinery MACT)	See section A.I.2.a.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	40 CFR Part 63, Subpart LLLLL	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall comply with the monitoring, record keeping, reporting, and testing requirements of 40 CFR Part 63.648 (the equipment leaks provisions of the refinery MACT), as specified in Part II (Facility Section) of this permit.

2.b [40 CFR Part 63.8683(b)]
The permittee shall comply with any applicable requirements in tables 1 and 2 below (40 CFR Part 63, Subpart LLLLL) by no later than May 1, 2006 as specified in these terms and conditions.

TABLE 1 TO SUBPART LLLLL OF PART 63.—EMISSION LIMITATIONS

For	You must meet the following emission limitation
1. Each blowing still, Group 1 asphalt loading rack, and Group 1 as-phalt storage tank at existing, new, and reconstructed asphalt proc-essing facilities; and each Group 1 asphalt storage tank at existing, new, and reconstructed roofing manufacturing lines; and each coat-ing mixer, saturator (including wet looper), coater, sealant applicator, adhesive applicator, and Group 1 asphalt storage tank at new and reconstructed asphalt roofing manufacturing lines.	a. Reduce total hydrocarbon mass emissions by 95 percent, or to a concentration of 20 ppmv, on a dry basis corrected to 3 percent oxygen; b. Route the emissions to a combustion device achieving a combus-tion efficiency of 99.5 percent; c. Route the emissions to a combustion device that does not use auxil-iary fuel achieving a total hydrocarbon (THC) destruction efficiency of 95.8 percent; d. Route the emissions to a boiler or process heater with a design heat input capacity of 44 megawatts (MW) or greater; e. Introduce the emissions into the flame zone of a boiler or process heater; or f. Route emissions to a flare meeting the requirements of § 63.11(b).
2. Each Group 2 asphalt storage tank at existing, new, and recon-structed asphalt processing facility and asphalt roofing manufacturing	Limit exhaust gases to 0 percent opacity.[b]

[a] As an alternative to meeting the particulate matter and opacity limits, these emission sources may comply with the THC percent reduction or combustion efficiency standards.
[b] The opacity limit can be exceeded for on consecutive 15-minute period in any 24-hour period when the storage tank transfer lines are being cleared. During this 15-minute period, the control device must not be bypassed. If the emissions from the asphalt storage tank are ducted to the saturator control device, the combined emissions from the saturator and storage tank must meet the 20 percent opacity limit (specified in 4.a of table 1) during this 15-minute period. At any other time, the opacity limit applies to Group 2 asphalt storage tanks.

Table 2 - Operating Limits

For	The permittee shall
1. Non-flare combustion devices with a design heat input capacity less than 44 MW or where the emissions are not introduced into the flame zone.	Maintain the 3-hour average [b] combustion zone temperature at or above the operating limit established during the performance test.
2. Flares	Meet the operating requirements specified in § 63.11(b).

3. Control devices used to comply with the particulate matter standards.	Maintain the 3-hour average(b) inlet gas temperature at or below the operating limit established during the performance test; and b. Maintain the 3-hour average [b] pressure drop across the device [c] at or below the operating limit established during the performance test.
4. Control devices other than combustion devices or devices used to comply with the particulate matter emission standards.	Maintain the approved monitoring parameters within the operating limits established during the performance test.

The operating limits specified in Table 2 are applicable if you are monitoring control device operating parameters to demonstrate continuous compliance. If you are using a CEMS or COMS, you must maintain emissions below the value established during the initial performance test.
[b] A 15-minute averaging period can be used as an alternative to the 3-hour averaging period for this parameter.
[c] As an alternative to monitoring the pressure drop across the control device, owners or operators using an ESP to achieve compliance with the emission limits specified in Table 1 of this subpart can monitor the voltage to the ESP. If this option is selected, the ESP voltage must be maintained at or above the operating limit established during the performance test.

2.c [40 CFR Part 63.8685(a)]
The permittee shall maintain compliance with the emission limitations (including operating limits) in this subpart at all times, except during periods of startup, shutdown, and malfunction.

2.d [40 CFR Part 63.8685(b)]
The permittee shall always operate and maintain this emissions unit, including air pollution control and monitoring equipment, according to the provisions in 40 CFR Part 63.6(e)(1)(i).

2.e [40 CFR Part 63.8685(c)]
The permittee shall develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in 40 CFR Part 63.6(e)(3).

2.f [40 CFR Part 63.8685(d)]
The permittee shall develop and implement a written site-specific monitoring plan according to the provisions in 40 CFR Part 63.8688(g) and (h).

2.g [40 CFR Part 63.8696]
The permittee shall comply with the requirements in the General Provisions of 40 CFR Part 63.1 through 63.15 as specified in Table 7 of 40 CFR Part 63.8696.

II. Operational Restrictions

1. The permittee shall burn only refinery fuel gas, natural gas and/or landfill gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. 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 stack 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 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.

Visible emissions shall be read at a point in the plume immediately after the dissipation of steam.

2. For each day during which the permittee burns a fuel other than refinery fuel gas, natural gas and/or landfill gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

The permittee shall comply with the following applicable requirements by no later than May 1, 2006 as specified in these terms and conditions.

3. [40 CFR Part 63.8688]
The permittee shall install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the following:

a. The CPMS must complete a minimum of one cycle of operation for each successive 15-minute period.

b. To determine the 3-hour average, you must:

i. Have a minimum of four successive cycles of operation to have a valid hour of data.

ii. Have valid data from at least three of four equally spaced data values for that hour from a CPMS that is not out-of- control according to your site-specific monitoring plan.

iii. Determine the 3-hour average of all recorded readings for each operating day, except as stated in § 63.8690(c). The permittee shall have at least two of the three hourly averages for that period using only hourly average values that are based on valid data *(i.e.*, not from out-of- control periods).

4. The permittee shall record the results of each inspection, calibration, and validation check.

5. The permittee shall meet the requirements of A.III.4 and those below for each temperature monitoring device used:

a. Locate the temperature sensor in a position that provides a representative temperature.

b. For a noncryogenic temperature range, use a temperature sensor with a minimum measurement sensitivity of 2.8 °C or 1.0 percent of the temperature value, whichever is larger.

c. If a chart recorder is used, it must have a sensitivity in the minor division of at least 20 °F.

d. Perform an accuracy check at least semiannually or following an operating parameter deviation:

i. According to the procedures in the manufacturer's documentation; or
ii. By comparing the sensor output to redundant sensor output; or

iii. By comparing the sensor output to the output from a calibrated temperature measurement device; or

iv. By comparing the sensor output to the output from a temperature simulator.

v. Conduct accuracy checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor.

vi. At least quarterly or following an operating parameter deviation, perform visual inspections of components if redundant sensors are not used.

6. For each pressure measurement device, you must meet the requirements of section A.III.4 and the following:

a. Locate the pressure sensor(s) in, or as close as possible, to a position that provides a representative measurement of the pressure.

b. Use a gauge with a minimum measurement sensitivity of 0.12 kiloPascals or a transducer with a minimum measurement sensitivity of 5 percent of the pressure range.

c. Check pressure tap pluggage daily. Perform an accuracy check at least quarterly or following an operating parameter deviation:

i. According to the procedures in the manufacturer's documentation; or

ii. By comparing the sensor output to redundant sensor output.

d. Conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range or install a new pressure sensor.

e. At least monthly or following an operating parameter deviation, perform a leak check of all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.

f. At least quarterly or following an operating parameter deviation, perform visible inspections on all components if redundant sensors are not used.

g. For monitoring parameters other than temperature and pressure drop, you must install and operate a CPMS to provide representative measurements of the monitored parameters.

7. For each flare, you must install 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.

8. As an option to installing the CPMS specified in paragraph (a) of this section, you may install a continuous emissions monitoring system (CEMS) or a continuous opacity monitoring system (COMS) that meets the requirements specified in § 63.8 and the applicable performance specifications of 40 CFR part 60, appendix B.

9. For each monitoring system required in this section, the permittee shall develop and make available for inspection by the permitting authority, upon request, a site-specific monitoring plan that addresses the following:

a. Installation of the CPMS, CEMS, or COMS 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);

b. Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system; and

c. Performance evaluation procedures and acceptance criteria *(e.g.,*calibrations).

10. In your site-specific monitoring plan, the permittee shall also address the following:

a. Ongoing operation and maintenance procedures in accordance with the general requirements of § 63.8(c)(1), (c)(3), (c)(4)(ii), (c)(7), and (c)(8);

b. Ongoing data quality assurance procedures in accordance with the general requirements of § 63.8(d); and

c. Ongoing record keeping and reporting procedures in accordance with the general requirements of § 63.10(c), (e)(1), and (e)(2)(i).

11. The permittee shall conduct a performance evaluation of each CPMS, CEMS, or COMS in accordance with your site-specific monitoring plan.

12. The permitee shall operate and maintain the CPMS, CEMS, or COMS in continuous operation according to the site-specific monitoring plan.

13. [40 CFR Part 8694 and 8695]
The permittee shall keep the following records:

a. 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)(2)(xiv).

b. The records in § 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

c. Records of performance tests, performance evaluations, and opacity and visible emission observations as required in § 63.10(b)(2)(viii).

14. The permittee shall maintain the records in § 63.6(h)(6) for visible emission observations.

15. The permitee shall maintain the applicable records required in Table 5 to show continuous compliance with each operating limit.

16. The permittee shall maintain records of any shared equipment determinations as specified in § 63.8682(b).

17. Records must be in a form suitable and readily available for expeditious review, according to § 63.10(b)(1).

18. As specified in § 63.10(b)(1), the permitee shall maintain each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

19. The permittee shall maintain 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). The permitteee may maintain the records offsite for the remaining 3 years.

20. [40 CFR Part 63.8690]
Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall monitor continuously (or collect data at all required intervals) at all times that the affected source is operating. This includes periods of startup, shutdown, and malfunction when the affected source is operating.

21. You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels, nor may such data be used in fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system.

22. [40 CFR Part 63.8691]

The permittee shall demonstrate continuous compliance with each applicable operating limit in Table 2 according to test methods specified in Table 5 to this subpart.

23. The permittee shall report each instance in which you did not meet each operating limit in Table 5 to this subpart that applies to you. This includes periods of startup, shutdown, and malfunction. These instances are deviations from the emission limitations in this subpart. These deviations must be reported according to the requirements in § 63.8693.

24. During periods of startup, shutdown, and malfunction, you must operate in accordance with the SSMP.

25. 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 in accordance with the SSMP. The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in § 63.6(e).

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than refinery fuel gas, natural gas and/or landfill gas is burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the City of Canton Health Department, Division of Air Pollution Control (CCHD, DAPC) by January 31 and July 31 of each year and shall cover the previous 6-month period.

The permittee shall comply with the following applicable requirements by no later than May 1, 2006 as specified in these terms and conditions.

3. [40 CFR Part 63.8692 and 63.8693]
The permittee shall submit all of the notifications in §§ 63.6(h)(4) and (5), 63.7(b) and (c), 63.8(f), and 63.9(b) through (f) and (h) that apply to you by the dates specified.

4. a. As specified in § 63.9(b)(2), if you start up your affected source before April 29, 2003, you must submit an Initial Notification not later than 120 calendar days after April 29, 2003.

5. b. As specified in § 63.9(b)(3), if you start up your new or reconstructed affected source on or after April 29, 2003, you must submit an Initial Notification not later than 120 calendar days after becoming subject to 40 CFR Part 63, Subpart LLLLL.

6. c. If the permittee is required to conduct a performance test, it shall be conducted by submiting 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).

7. d. If the permittee is required to conduct a performance test, design evaluation, opacity observation, visible emission observation, or other initial compliance demonstration as specified in Table 3 or 4 to this subpart, the permittee shall submit a Notification of Compliance Status according to § 63.9(h)(2)(ii). The permittee shall 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).

8. e. If the permittee uses data from a previously-conducted emission test to serve as documentation of conformance with the emission standards and operating limits of this subpart, the permittee shall submit the test data in lieu of the initial performance test results with the Notification of Compliance Status required under the previous paragraph.

4. The permittee shall submit each applicable report in Table 6 unless the Administrator has approved a different schedule for submission of reports under § 63.10(a). If the administrator has approved a different schedule, the permittee shall submit each report by the date in Table 6 according to the following dates:

a. The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in § 63.8683 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for this emissions unit in § 63.8683.

b. The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in § 63.8683.

c. Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

d. 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.

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), the permittee may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of the dates in the previous section.

6. If there were no periods during which the CPMS, CEMS, or COMS was out-of-control as specified in § 63.8(c)(7), a statement that there were no periods during which the CPMS, CEMS, or COMS was out-of-control during the reporting period.

7. The compliance report must contain the following information:

a. Company name and address.

b. 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.

c. Date of report and beginning and ending dates of the reporting period.

d. If you had a startup, shutdown or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in § 63.10(d)(5)(i).

e. If there are no deviations from any emission limitations (emission limit, operating limit, opacity limit, and visible emission limit) that apply to you, a statement that there were no deviations from the emission limitations during the reporting period.

8. For each deviation from an emission limitation (emission limit, operating limit, opacity limit, and visible emission limit), the permittee shall include the information in the previous section, and the following information. This includes periods of startup, shutdown, and malfunction.

a. The date and time that each malfunction started and stopped.

b. The date and time that each CPMS, CEMS, or COMS was inoperative, except for zero (low-level) and high-level checks.

c. The date, time and duration that each CPMS, CEMS, or COMS was out-of- control, including the information in § 63.8(c)(8).

d. The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

e. A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

f. 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 other unknown causes.

g. A summary of the total duration of CPMS, CEMS, or COMS downtime during the reporting period and the total duration of CPMS, CEMS, or COMS downtime as a percent of the total source operating time during that reporting period.

h. An identification of each air pollutant that was monitored at the affected source.

i. A brief description of the process units.

j. A brief description of the CPMS, CEMS, or COMS.

k. The date of the latest CPMS, CEMS, or COMS certification or audit.

l. A description of any changes in CPMS, CEMS, or COMS, processes, or controls since the last reporting period.

9. Each affected source that has obtained a Title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 71 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 an affected source submits a compliance report pursuant to Table 6 to this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 1.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.
If acceptable to both the Administrator and you, you may submit reports and notifications electronically.

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:

   a. Emission Limitation:

      20% opacity as a 6-minute average

      Applicable Compliance Method:

      If required, compliance shall be demonstrated based upon the procedures specified in 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

The permittee shall demonstrate compliance and conduct performance testing as specified in the following terms and conditions by no later than May 1, 2006.

2. [40 CFR Part 63.8686 and 63.8687]
   For existing affected sources, the permittee shall conduct performance tests no later than 180 days after the compliance date that is specified for your source in § 63.8683 and according to the provisions in § 63.7(a)(2).

3. As an alternative to the requirement specified in paragraph (a) of this section, the permittee may use the results of a previously-conducted emission test to demonstrate compliance with the emission limitations in this subpart if you demonstrate to the Administrator's satisfaction that:

   a. No changes have been made to the process since the time of the emission test; and

   b. The operating conditions and test methods used during testing conform to the requirements of this subpart; and

   c. The control device and process parameter values established during the previously-conducted emission test are used to demonstrate continuous compliance with this subpart.

4. The permittee shall conduct each applicable performance test in Table 3.

5. Each performance test must be conducted under normal operating conditions and under the conditions specified in Table 3.

6. The permittee shall not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in § 63.7(e)(1).

7. Except for opacity and visible emission observations, 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.

8. The permittee shall use the equations in 40 CFR Part 63.8687 to determine compliance with the emission limitations.

9. [40 CFR Part 63.8689]
The permittee shall demonstrate initial compliance with each emission limitation that applies to you according to Table 4 to this subpart.

10. The permittee shall establish each site-specific operating limit in Table 2 to this subpart that applies to you according to the requirements in § 63.8687 and Table 3 to this subpart.

11. You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in § 63.8692(e).

VI. Miscellaneous Requirements

The following requirements of 40 CFR Part 63, Subpart LLLLL, apply from May 16, 2005 and onward, however the initial compliance reports and initial testing will need to be submitted in accordance with the requirements in the tables below.

Table 3 - Requirements for Performance Tests.

For	The Permittee shall	Using	According to the Following Requirments

1. All particulate matter, total hydrocarbon, carbon mon-oxide, and carbon dioxide emission tests.	a. Select sampling port's location and the number of traverse points.	i. EPA test method 1 or 1A in appendix A to part 60 of this chapter.	A. For demonstrating compliance with the total hydrocarbon percent reduction standard, the sampling sites must be located at the inlet and outlet of the control device and prior to any releases to the atmosphere. B. For demonstrating compliance with the particulate matter mass emission rate, THC destruction efficiency, THC outlet concentration, or combustion efficiency standards, the sampling sites must be located at the outlet of the control device and prior to any releases to the atmosphere.
2. All particulate matter and total hydrocarbon tests.	Determine velocity and volumetric flow rate.	EPA test method 2, 2A, 2C, 2D, 2F, or 2G, as appropriate, in appendix A to part 60 of this chapter.	
.			
3. All particulate matter and total hydrocarbon tests.	.Determine the gas molecular weight used for flow rate de-termination.	EPA test method 3, 3A, 3B, as appropriate, in appendix A to part 60 of this chapter	
4. All particulate matter, total hydrocarbon, carbon mon-oxide, and carbon dioxide emission tests.	Measure moisture content of the stack gas.	EPA test method 4 in appendix A to part 60 of this chapter	

5. All particulate matter emission tests.	Measure the asphalt processing rate or the asphalt roofing manufacturing rate and the asphalt content of the product manufactured, as appropriate.		
6. Each control device used to comply with the particulate matter emission standards.	Measure the concentration of particulate matter.	EPA test method 5A in appendix A to part 60 of this chapter.	For demonstrating compliance with the particulate matter standard, the performance tests must be conducted under normal operating conditions and while manufacturing the roofing product that is expected to result in the greatest amount of hazardous air pollutant emissions.
7. All opacity tests	Conduct opacity observations ..	EPA test method 9 in appendix A to part 60 of this chapter.	Conduct opacity observations for at least 3 hours and obtain 30, 6-minute aver-ages.
8. All visible emission tests	Conduct visible emission observations	EPA test method 22 in appendix A to part 60 of this chapter.	Modify EPA test method 22 such that readings are recorded every 15 seconds for a period of consecutive observations totaling 60 minutes.

9. Each combustion device used to comply with the combustion efficiency or THC standards.	a. Measure the concentration of carbon dioxide. b. Measure the concentration of carbon monoxide. EPA test method 3A in appendix A to part 60 of this chapter. EPA test method 10 in appendix A to part 60 of this chapter. c. Measure the concentration of total hydrocarbons.	EPA test method 3A in appendix A to part 60 of this chapter. EPA test method 10 in appendix A to part 60 of this chapter. EPA test method 25A in appendix A to part 60 of this chapter.	
10. Each control device used to comply with the THC reduction efficiency or outlet concentration standards.	Measure the concentration of total hydrocarbons.	EPA test method 25A in appendix A to part 60 of this chapter.	
11. Each combustion device	Establish a site-specific com-bustion zone temperature limit.	Data from the CPMS and the applicable performance test method(s).	Permittee shall collect combustion zone temperature data every 15 minutes during the entire period of the initial 3-hour performance test, and determine the average combustion zone temperature over the 3-hour performance test by computing the average of all of the 15- minute readings.

12. Each control device used to comply with the particulate matter emission standards.	Establish a site-specific inlet gas temperature limit; and establish a site-specific limit for the pressure drop across the device. .	Data from the CPMS and the applicable performance test method(s).	You must collect the inlet gas temperature and pressure drop b data every 15 min-utes during the entire period of the ini-tial 3-hour performance test, and deter-mine the average inlet gas temperature and pressure drop c over the 3-hour performance test by computing the av-erage of all of the 15-minute readings.
13. Each control device other than a combustion device or device used to comply with the particulate matter emission standards.	Establish site-specific monitoring parameters.	Process data and data from the CPMS and the applicable performance test method(s).	You must collect monitoring parameter data every 15 minutes during the entire period of the initial 3-hour performance test, and determine the average monitoring parameter values over the 3-hour performance test by computing the av-erage of all of the 15-minute readings.
14. Each flare used to comply with the THC percent reduction or PM emission limits.	Assure that the flare is operated and maintained in conformance with its design	The requirements of § 63.11(b)	

a As specified in § 63.8687(e), you may request that data from a previously-conducted emission test serve as documentation of conformance with the emission standards and operating limits of this subpart.

b Performance tests are not required if: (1) The emissions are routed to a boiler or process heater with a design heat input capacity of 44 MW or greater; or (2) the emissions are introduced into the flame zone of a boiler or process heater.
c As an alternative to monitoring the pressure drop across the control device, owners or operators using an ESP to achieve compliance with the emission limits specified in Table 1 of this subpart can monitor the voltage to the ESP.

Table 4 - Initial Compliance With Emission Limitations

For	For the following emission limitations	You have demonstrated initial compliance if
Each blowing still, Group 1 asphalt loading rack, and Group 1 asphalt storage tank at existing asphalt processing facilities	a. Reduce total hydrocarbon mass emissions by 95 percent or to a concentration of 20 ppmv, on a dry basis corrected to 3 percent oxygen.	i. The total hydrocarbon emissions, determined using equations in 40 CFR Part 63.8687 and the test methods and procedures in Table 3 over the period of the performance test are reduced by at least 95 % by weight or to a concentration of 20 ppmv, on a dry basis corrected to 3 percent oxygen; and ii. You have a record of the average control device operating parameters over the performance test during which emissions where reduced according to 1.a.i of this table.
	b. The route of emissions to a combustion device achieving a combustion efficiency of 99.5 percent	i. The combustion efficiency of the combustion device, determined using the equations in 40 CFR Part 63.8687 and the test methods and procedures in Table 3 over the period of the performance test is at least 99.5 %; and ii. The permittee has a record of the average combustion zone temperature and carbon monoxide, carbon dioxide, and total hydrocarbon outlet concentrations over the performance test during which the comvustion efficiency was at least 99.5 %
	c. Route the emissions to a combustion device that does not use auxiliary fuel achieving a THC destruction efficiency of 95.8 percent.	i. The THC destruction efficiency of the combustion device, determined using the equations in § 63.8687 and the test methods and procedures in Table 3 to this subpart, over the period of the performance test is at least 95.8 percent; and

		ii. You have a record of the average combustion zone temperature a and carbon monoxide, carbon dioxide, and total hydrocarbon outlet concentrations over the performance test during which the THC destruction efficiency was at least 95.8 percent.
	d. Route emissions to a boiler or process heater with a design heat input capacity of 44 MW or greater.	You have a record of the boiler or process heater design heat capacity.
	e. Introduce the emissions into the flame zone of a boiler or process heater..	You have a record that shows the emissions are being introduced into the boiler or process heater flame zone
	f. Route emissions to a flare meeting the requirements of § 63.11(b).	You have a record of the flare design and operating requirements.
Each Group 2 asphalt storage tank at existing asphalt processing facilities.	Limit exhaust gases to 0 percent opacity	The opacity, measured using EPA test method 9, for each of the first 30 6-minute averages during the initial compliance period described in 40 CFR Part 63. 8686(b) does not exceed 0 percent opacity.

a) If you use a CEMS or COMS to demonstrate compliance with the emission limits, you are not required to record control device operating parameters.

Table 5 - Continuous Compliance with Operating Limits.

For	For the following operating limits	You must demonstrate continuous compliance by

1. Each non-flare combustion device(b)	a. Maintain the 3-hour average combustion zone temperature at or above the operating limit establishing during the performance test.	i. Passing the emissions through the control device; and ii. Collecting the combustion zone temperature data according to § 63.8688(b); and iii. Reducing combustion zone temperature data to 3-hour averages according to calculations in Table 3 to this subpart; and iv. Maintaining the 3-hour average combustion zone temperature within the level established during the performance test.
2. Each flare	Meet the operating requirements specified in § 63.11(b).	The flare pilot light must be present at all times and the flare must be operating at all times that emissions may be vented to it.
3. Control devices used to comply with the particulate matter emission standards.	a. Maintain the 3-hour c average inlet gas temperature and pressure drop across device at or below the operating limits established during the performance test.	i. Passing the emissions through the control device; and ii. Collecting the inlet gas temperature and pressure drop d data according to § 63.8688 (b) and (c); and iii. Reducing inlet gas temperature and pressure drop d data to 3-hour c averages according to calculations in Table 3 to this subpart; and iv. Maintaining the 3-hour c average inlet gas temperature and pressure drop d within the level established during the performance test.
4. Control devices other than combustion devices or devices used to comply with the particulate matter emission.	a. Maintain the monitoring parameters within the operating limits established during the performance test.	i. Passing the emissions through the devices; ii. Collecting the monitoring parameter data according to § 63.8688(d); and iii. Reducing the monitoring parameter data to 3-hour c averages according to calculations in Table 3 to this subpart; and iv. Maintaining the monitoring

		parameters within the level established during the performance test.

a) The operating limits specified in Table 2 and the requirements specified in Table 5 are applicable if you are monitoring control device operating parameters to demonstrate continuous compliance. If you use a CEMS or COMS to demonstrate compliance with the emission limits, you are not required to record control device operating parameters. However, you must maintain emissions below the value established during the initial performance test. Data from the CEMS and COMS must be reduced as specified in § 63.9(g).

b) Continuous parameter monitoring is not required if (1) the emissions are routed to a boiler or process heater with a with a design heat input capacity of 44 MW or greater; or (2) the emissions are introduced into the flame zone of a boiler or process heater.

c) A 15-minute averaging period can be used as an alternative to the 3-hour averaging period for this parameter.

d) As an alternative to monitoring the pressure drop across the control device, owners or operators using an ESP to achieve compliance with the emission limits specified in Table 1 of this subpart can monitor the voltage to the ESP. If this option is selected, the ESP voltage must be maintained at or above the operating limit established during the performance test.

Table 6 - Requirements for Reports

You must submit	The report must contain	You must submit the report
1. An initial notification	The information in 40 CFR Part 63.9(b)	According to the requirements in§ 63.9(b).
2. A notification of performance test	A written notification of the intent to conduct a performance test.	At least 60 calendar days before the performance test is scheduled to begin, as required in § 63.9(e).
3. A notification of opacity and visible emission observations.	A written notification of the intent to conduct opacity and visible emission observations.	According to the requirements in § 63.9(f).
4. Notification of compliance status	The information in 40 CFR Part 63.9(h)(2) through (5), as applicable	According to the requirements in § 63.9(h)(2) through (5), as applicable.

5. A compliance report	a. A statement that there were no deviations from the emission limitations during the reporting period, if there are no deviations from any emmission limitations (emission limit, operating limit, opacity limit, and visible emission limit) that apply to you.	Semiannually according to the requirements in § 63.8693(b).
	b. If there were no periods during which the CPMS, CEMS, or COMS was out-of-control as specified in § 63.8(c)(7), a statement that there were no periods during which the CPMS, CEMS, or COMS was out-of-control during the reporting period.	Semiannually according to the requirements in § 63.8693(b).
	c. If you have a deviation from any emission limitation (emission limit, operating limit, opacity limit, and visible emission limit), the report must contain the information in § 63.8693(c). If there were periods during which the CPMS, CEMS, or COMS was out-of-control, as specified in § 63.8(c)(7), the report must contain the information in § 63.8693(d).	Semiannually according to the requirements in § 63.8693(b).
	d. If you had a startup, shutdown or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in § 63.10(d)(5)(i).	Semiannually according to the requirements in § 63.8693(b).
6. An immediate startup, shutdown, and malfunction report if you have a start-up, shutdown, or malfunction during the reporting period and actions taken were not consistent with your startup, shutdown, and malfunction plan.	The information in § 63.10(d)(5)(ii)	By fax or telephone within 2 working days after starting actions inconsistent with the plan followed by a letter within 7 working days after the end of the event unless you have made alternative arrangements with the permitting authority.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is an asphalt oxidizer with a thermal afterburner and is designated as emissions unit P007. The asphalt oxidizer process involves blowing air into vacuum bottoms material which oxidizes this material, thereby creating oxidized asphalt. Off gases are burned in the thermal afterburner which utilizes refinery fuel gas, natural gas and/or landfill gas as fuel.	OAC rule 3745-21-09(VV)(2)	See section B.I.2.a.

2. Additional Terms and Conditions

2.a All of the VOC emissions from this emissions unit shall be vented to a thermal afterburner that will provide an overall control efficiency for VOC that is equal to or greater than 95%.

II. Operational Restrictions

1. The average combustion temperature within the thermal afterburner, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1000 degrees F.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal afterburner when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information for each day:

a. all 3-hour blocks of time during which the average combustion temperature within the thermal afterburner, when the emissions unit was in operation, was less than 1000 degrees F; and

b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time during which the average combustion temperature within the thermal afterburner does not comply with the temperature limitation specified above.

V. Testing Requirements

1. Compliance with the emission limitations in section B.I.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emission Limitation:

      95% control efficiency for VOC emissions

      Applicable Compliance Method:

      Compliance with the control efficiency requirement shall be demonstrated based upon the emission testing procedures specified in section B.V.2 and in accordance with OAC rule 3745-21-10(C).

2. The permittee shall conduct emission testing for this emissions unit in accordance with the following requirements:

   a. The emission testing shall be conducted within 9 months after issuance of this permit and within 6 months prior to permit expiration.

   b. The emissions testing shall be conducted to demonstrate compliance with the control efficiency limitation for VOC specified in section B.I.2.a. If emission testing at the inlet is not feasible, the permittee may use AP-42 or other acceptable emission factor to determine the uncontrolled mass emission rate for this emissions unit.

   c. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Method 25. Alternative USEPA-approved test methods may be used with prior approval from the Ohio EPA.

   d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the CCHD, DAPC.

e. The temperature of the exhaust gases from the thermal oxidizer shall be continuously monitored and recorded during each test run.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD, DAPC. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and dates of the tests and the persons who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the CCHD, DAPC's refusal to accept the results of the emission test.

Personnel from the CCHD, DAPC shall be permitted to witness the tests, 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 shall be signed by the person or persons responsible for the tests and submitted to the CCHD, DAPC within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CCHD, DAPC.

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
wastewater and stormwater streams within the refinery and refinery wastewater treatment system	OAC rule 3745-21-09(M)(2)	See section A.I.2.a.
	40 CFR Part 60, Subpart QQQ	See sections A.I.2.c and A.I.2.f.
	40 CFR Part 61, Subpart FF	See section A.I.2.b.iv.
	40 CFR Part 63, Subpart CC 40 CFR 63.640(m)	See section A.I.2.b.
	40 CFR 63.640(o)(1)	See section A.I.2.c.
	40 CFR Part 63, Subpart A 40 CFR 63.642(c)	See section A.I.2.d.
These terms and conditions include emissions unit P021, the Desalter Water Flash Column and	40 CFR Part 63, Subpart CC (Equipment Leak Provisions) OAC rule 3745-21-09(T)	See section A.I.2.g.
Emissions unit P020, the West Tank Farm Project, (CA-003) Individual Drain System	OAC rule 3745-20-07(B)	Except as otherwise provided in this rule, all new stationary emission sources of photochemically reactive materials shall minimize such emissions by the latest available techniques and operating practices in accordance with best current technology See section A.I.2.h.

2. **Additional Terms and Conditions**

2.a Except for any wastewater separator which is used solely for once-through, noncontact cooling water or for intermittent tank farm drainage resulting from accumulated precipitation, the permittee shall control the emissions of VOC from any wastewater separator by equipping all forebay sections and other separator sections with covers and seals which minimize the amount of oily water exposed to the ambient air. In addition, all covers and forebay and separator sections shall be equipped with the lids and seals which are kept in a closed position at all times except when in actual use.

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

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

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

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

iv. [63.647(a)]
Except as provided in 40 CFR 63.647(b), the permittee of a Group 1 wastewater stream shall comply with the requirements of 40 CFR 61.340 through 61.355 of subpart FF for each process wastewater stream that meets the definition in 40 CFR 63.641 [see section A.I.2.].

(a) [63.641]
A *Group 1 wastewater stream* means a wastewater stream at a petroleum refinery with a total annual benzene loading of 10 megagrams (Mg) per year or greater as calculated according to the procedures in 40 CFR 61.342 of subpart FF that has a flow rate of 0.02 liters per minute or greater, a benzene concentration of 10 parts per million by weight or greater, and is not exempt

from control requirements under the provisions of 40 CFR Part 61, subpart FF.

(b) *A Group 2 wastewater stream* means a wastewater stream that does not meet the definition of Group 1 wastewater stream.

2.c [63.640(o)]
Overlap of subpart CC with other regulations for wastewater.

i. [63.640(o)(1)]
A Group 1 wastewater stream managed in a piece of equipment that is also subject to the provisions of 40 CFR Part 60, subpart QQQ, is required to comply only with 40 CFR Part 63, subpart CC.

ii. [63.640(o)(2)]
A Group 1 or Group 2 wastewater stream that is conveyed, stored, or treated in a wastewater stream management unit that also receives streams subject to the provisions of 40 CFR 63.133 through 63.147 of subpart G wastewater provisions shall comply as specified in 63.640(o)(2)(i) or (o)(2)(ii). Compliance with the provisions of this paragraph shall constitute compliance with the requirements of 40 CFR Part 63, Subpart CC for that wastewater stream.

(a) [63.640(o)(2)(i)]
Comply with 63.640(o)(2)(i)(A) through (o)(2)(i)(C).

(i) [63.640(o)(2)(i)(A)]
The provisions in 40 CFR 63.133 through 63.140 of subpart G for all equipment used in the storage and conveyance of the Group 1 or Group 2 wastewater stream.

(ii) [63.640(o)(2)(i)(B)]
The provisions in both 40 CFR Part 61, subpart FF and in 40 CFR 63.138 and 63.139 of subpart G for the treatment and control of the Group 1 or Group 2 wastewater stream.

(iii) [63.640(o)(2)(i)(C)]
The provisions in 40 CFR 63.143 through 63.148 of subpart G for monitoring and inspections of equipment and for record keeping and reporting requirements. The permittee is not required to comply with the monitoring, record keeping, and reporting requirements associated with the treatment and control requirements in 40 CFR 61.355 through 61.357.

(b) [63.640(o)(2)(ii)]
Comply with the 40 CFR 63.640(o)(2)(ii)(A) and (o)(2)(ii)(B).

(i) [63.640(o)(2)(ii)(A)]

Comply with the provisions of 40 CFR 63.133 through 63.148 and 63.151 and 63.152 of subpart G.

(ii) [63.640(o)(2)(ii)(B)]
For any Group 2 wastewater stream or organic stream whose benzene emissions are subject to control through the use of one or more treatment processes or waste management units under the provisions of 40 CFR Part 61, Subpart FF on or after December 31, 1992, comply with the requirements of 40 CFR 63.133 through 63.147 of subpart G for Group 1 wastewater streams.

2.d Table 6 of 40 CFR Part 63, subpart CC, specifies the provisions of 40 CFR Part 63, subpart A, that apply and those that do not apply to permittees of sources subject to subpart CC.

2.e All process wastewater from the crude desalter shall be discharged to a steam stripper for the recovery of condensable hydrocarbons, and all VOC emissions from the steam stripper shall be vented to a flare that complies with the requirements of OAC rule 3745-21-09(DD)(10)(d) [see Part II section A.II]. The monitoring, record keeping and reporting requirements for refinery flares complying with OAC rule 3745-21-09(DD)(10)(d) are contained in Part II Sections I through V of this permit.

2.f Group 2 wastewater streams that are managed in a piece of equipment subject to 40 CFR Part 60, Subpart QQQ, shall comply with the requirements of 40 CFR 60.692-1 to 60.692-5 and 40 CFR 60.693-1 and 60.693-2 [see section A.II], except during periods of startup, shutdown or malfunction.

2.g This emissions unit is subject to the provisions of 40 CFR Part 61, Subpart FF and the Equipment Leak Provisions in Part II of the Facility Section of these terms and conditions only.

2.h This emissions unit is subject to 40 CFR Part 60, Subpart QQQ. Each drain shall be equipped with water seal controls. Compliance with the requirements of 40 CFR Part 60, Subpart QQQ constitutes compliance with OAC rule 3745-21-07(B).

2.i The permittee shall implement the enhancements to the Benzene Waste NESHAP program as outlined in Paragraph 18 of the global settlement agreement. Although the enhancements will terminate on December 31, 2008, MAP obtained release from civil liabilities associated with 40 CFR Part VV and GGG and 40 CFR Part 63, Subparts CC for projects or activities prior to May 11, 2001.

II. Operational Restrictions

1. 40 CFR Part 63, Subpart CC

a. [63.642(k)] GENERAL STANDARDS
The permittee of an existing source may comply, and the permittee of a new source shall comply with the wastewater provisions in 40 CFR 63.647 [see section A.II.].

i. [63.642(k)(1)]
The permittee using this compliance approach shall also comply with the requirements of 40 CFR 63.654 [see section A.IV.] as applicable.

ii. [63.642(k)(2)]
The permittee using this compliance approach is not required to calculate the annual emission rate specified in 40 CFR 63.642(g) of subpart CC.

b. [63.647] WASTEWATER PROVISION

i. [63.647(b)]
As used in this section, all terms not defined in 40 CFR 63.641 shall have the meaning given them in the Clean Air Act or in 40 CFR 61.341, of subpart FF.

ii. [63.647(c)]
Each permittee required under 40 CFR Part 61, subpart FF to perform periodic measurement of benzene concentration in wastewater, or to monitor process or control device operating parameters shall operate in a manner consistent with the minimum or maximum (as appropriate) permitted concentration or operating parameter values. Operation of the process, treatment unit, or control device resulting in a measured concentration or operating parameter value outside the permitted limits shall constitute a violation of the emission standards. Failure to perform required leak monitoring for closed vent systems and control devices or failure to repair leaks within the time period specified in 40 CFR Part 61, subpart FF, shall constitute a violation of the standard.

2. 40 CFR Part 61, Subpart FF - National Emission Standard for Benzene Waste Operations

a. [61.340] Applicability

i. [61.340(c)]
The following waste is exempt from the requirements of 40 CFR Part 61, Subpart FF.

(a) Waste in the form of gases or vapors that is emitted from process fluids; and,
(b) Waste that is contained in a segregated stormwater sewer system.

ii. [61.340(d)]
Any gaseous stream from a waste management unit, treatment process, or wastewater treatment system routed to a fuel gas system, as defined in 40 CFR 61.341, is exempt from 40 CFR Part 61, Subpart FF. No testing, monitoring, record keeping, or reporting is required under 40 CFR Part 61, Subpart FF for any gaseous stream from a waste management unit, treatment process, or wastewater treatment unit routed to a fuel gas system.

b. [61.342] GENERAL STANDARDS

i. [61.342(a)]

The permittee shall be exempt from the requirements of 40 CFR 61.342(b) and (c) if the total annual benzene quantity from facility waste is less than 10 megagrams per year (Mg/yr)(11 tons/yr). The total annual benzene quantity from facility waste is the sum of the annual benzene quantity for each waste stream at the facility that has a flow-weighted annual average water content greater than 10 percent or that is mixed with water, or other wastes, at any time and the mixture has an annual average water content greater than 10 percent. The benzene quantity in a waste stream is to be counted only once without multiple counting if other waste streams are mixed with or generated from the original waste stream. Other specific requirements for calculating the total annual benzene waste quantity are as follows:

(a) [61.342(a)(1)]
Wastes that are exempted from control under 40 CFR 61.342(c)(2) and 61.342(c)(3) are included in the calculation of the total annual benzene quantity if they have an annual average water content greater than 10 percent, or if they are mixed with water or other wastes at any time and the mixture has an annual average water content greater than 10 percent.

(b) [61.342(a)(2)]
The benzene in a material subject to this subpart that is sold is included in the calculation of the total annual benzene quantity if the material has an annual average water content greater than 10 percent.

(c) [61.342(a)(3)]
Benzene in wastes generated by remediation activities conducted at the facility, such as the excavation of contaminated soil, pumping and treatment of groundwater, and the recovery of product from soil or groundwater, are not included in the calculation of total annual benzene quantity for that facility. If the facility's total annual benzene quantity is 10 Mg/yr (11 ton/yr) or more, wastes generated by remediation activities are subject to the requirements of paragraphs 40 CFR 61.342(c) through (h) of subpart FF [see section A.II.]. If the facility is managing remediation waste generated offsite, the benzene in this waste shall be included in the calculation of total annual benzene quantity in facility waste, if the waste streams have an annual average water content greater than 10 percent, or if they are mixed with water or other wastes at any time and the mixture has an annual average water content greater than 10 percent.

(d) [61.342(a)(4)]
The total annual benzene quantity is determined based upon the quantity of benzene in the waste before any waste treatment occurs to remove the benzene except as specified in 40 CFR 61.355(c)(1)(i)(A) through (C) [see section A.V.].

ii. [61.342(c)]
Each permittee of a facility at which the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr (11 ton/yr) as determined in 61.347(a) shall manage and treat the facility waste as follows:

(a) [61.342(c)(1)]
For each waste stream that contains benzene, including (but not limited to) organic waste streams that contain less than 10 percent water and aqueous waste streams, even if the wastes are not discharged to an individual drain system, the permittee shall:

(i) [61.342(c)(1)(i)]
Remove or destroy the benzene contained in the waste using a treatment process or wastewater treatment system that complies with the standards specified in 61.348 [see section A.II.].

(ii) [61.342(c)(1)(ii)]
Comply with the standards specified in 40 CFR 61.343 through 61.347 [see section A.II.] for each waste management unit that receives or manages the waste stream prior to and during treatment of the waste stream in accordance with 40 CFR 61.342(c)(1)(i).

(iii) [61.342(c)(1)(iii)]
Each waste management unit used to manage or treat waste streams that will be recycled to a process shall comply with the standards specified in 40 CFR 61.343 through 61.347 [see section A.II.]. Once the waste stream is recycled to a process, including to a tank used for the storage of production process feed, product, or product intermediates, unless this tank is used primarily for the storage of wastes, the material is no longer subject to 40 CFR 61.342(c).

(b) [61.342(c)(2)]
A waste stream is exempt from 40 CFR 61.342(c)(1) provided that the permittee demonstrates initially and, thereafter, at least once per year that the flow-weighted annual average benzene concentration for the waste stream is less than 10 ppmw as determined by the procedures specified in 40 CFR 61.355(c)(2) or 61.355(c)(3) [see section A.V.].

(c) [61.342(c)(3)]
A waste stream is exempt from 40 CFR 61.342(c)(1) provided that the permittee demonstrates initially and, thereafter, at least once per year that the conditions specified in either 40 CFR 61.342(c)(3)(i) or (c)(3)(ii) are met.

(i) [61.342(c)(3)(i)]
The waste stream is process wastewater that has a flow rate less than 0.02 liters per minute (0.005 gallons per minute) or an annual wastewater quantity of less than 10 Mg/yr (11 ton/yr); or

(ii) [61.342(c)(3)(ii)]
All of the following conditions are met:

(aa) [61.342(c)(3)(i)(A)]

The permittee does not choose to exempt process wastewater under 61.342(c)(3)(i);

(bb) [61.342(c)(3)(i)(B)]
The total annual benzene quantity in all waste streams chosen for exemption in 40 CFR 61.342(c)(3)(ii) does not exceed 2.0 Mg/yr (2.2 ton/yr) as determined in the procedures in 40 CFR 61.355(j) [see section A.V.]; and

(cc) [61.342(c)(3)(i)(C)]
The total annual benzene quantity in a waste stream chosen for exemption, including process unit turnaround waste, is determined for the year in which the waste is generated.

iii. [61.342(d)]
As an alternative to the requirements specified in paragraphs (c) and (e) of 40 CFR 61.342, the permittee of a facility at which the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr (11 ton/yr) as determined in paragraph (a) of 40 CFR 61.342 may elect to manage and treat the facility waste as follows:

(a) [61.342(d)(1)]
The permittee shall manage and treat facility waste other than process wastewater in accordance with the requirements of paragraph (c)(1) of 40 CFR 61.342.

(b) [61.342(d)(2)]
The permittee shall manage and treat process wastewater in accordance with the following requirements:

(i) [61.342(d)(2)(i)]
Process wastewater shall be treated to achieve a total annual benzene quantity from facility process wastewater less than 1 Mg/yr (1.1 ton/yr). Total annual benzene from facility process wastewater shall be determined by adding together the annual benzene quantity at the point of waste generation for each untreated process wastewater stream plus the annual benzene quantity exiting the treatment process for each process wastewater stream treated in accordance with the requirements of paragraph (c)(1)(i) of 40 CFR 61.342.

(ii) [61.342(d)(2)(ii)]
Each treated process wastewater stream identified in paragraph (d)(2)(i) of 40 CFR 61.342 shall be managed and treated in accordance with paragraph (c)(1) of 40 CFR 61.342.

(iii) [61.342(d)(2)(iii)]

Each untreated process wastewater stream identified in paragraph (d)(2)(i) of 40 CFR 61.342 is exempt from the requirements of paragraph (c)(1) of 40 CFR 61.342.

iv. [61.342(e)]
As an alternative to the requirements specified in paragraphs (c) and (d) of 40 CFR 61.342, the permittee of a facility at which the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr (11 ton/yr) as determined in paragraph (a) of 40 CFR 61.342 may elect to manage and treat the facility waste as follows:

(a) [61.342(e)(1)]
The permittee shall manage and treat facility waste with a flow-weighted annual average water content of less than 10 percent in accordance with the requirements of paragraph (c)(1) of 40 CFR 61.342; and

(b) [61.342(e)(2)]
The permittee shall manage and treat facility waste (including remediation and process unit turnaround waste) with a flow-weighted annual average water content of 10 percent or greater, on a volume basis as total water, and each waste stream that is mixed with water or wastes at any time such that the resulting mixture has an annual water content greater than 10 percent, in accordance with the following:

(i) [61.342(e)(2)(i)]
The benzene quantity for the wastes described in paragraph (e)(2) of 40 CFR 61.342 must be equal to or less than 6.0 Mg/yr (6.6 ton/yr), as determined in 40 CFR 61.355(k) [see section A.V]. Wastes as described in paragraph (e)(2) of 40 CFR 61.342 that are transferred offsite shall be included in the determination of benzene quantity as provided in 40 CFR 61.355(k). The provisions of paragraph (f) of 40 CFR 61.342 shall not apply to any permittee who elects to comply with the provisions of paragraph (e) of 40 CFR 61.342.

(ii) [61.342(e)(2)(ii)]
The determination of benzene quantity for each waste stream defined in paragraph (e)(2) of 40 CFR 61.342 shall be made in accordance with 40 CFR 61.355(k) [see section A.V].

v. [61.342(f)]
Rather than treating the waste onsite, the permittee may elect to comply with paragraph (c)(1)(i) of 40 CFR 61.342 by transferring the waste offsite to another facility where the waste is treated in accordance with the requirements of paragraph (c)(1)(i) of 40 CFR 61.342. The permittee transferring the waste shall:

(a) [61.342(f)(1)]

Comply with the standards specified in 40 CFR 61.343 through 61.347 of 40 CFR 61 for each waste management unit that receives or manages the waste prior to shipment of the waste offsite.

(b) [61.342(f)(2)]
Include with each offsite waste shipment a notice stating that the waste contains benzene which is required to be managed and treated in accordance with the provisions of 40 CFR Part 61, Subpart FF.

vi. [61.342(g)]
Compliance with 40 CFR Part 61, Subpart FF will be determined by review of facility records and results from tests and inspections using methods and procedures specified in 40 CFR 61.355 [see section A.V].

vii. [61.342(h)]
Permission to use an alternative means of compliance to meet the requirements of 40 CFR 61.342 through 61.352 may be granted by the Administrator of USEPA as provided in 40 CFR 61.353.

c. [61.343] STANDARDS: TANKS

i. [61.343(a)]
Except as provided in 40 CFR 61.343(b) and in 40 CFR 61.351 [see section A.II.], the permittee must meet the standards in paragraph (a)(1) and (a)(2) of 40 CFR 61.343 for each tank in which the waste stream is placed in accordance with 40 CFR 61.342(c)(1)(ii) [see section A.II.]. The standards in this section apply to the treatment and storage of the waste stream in a tank, including dewatering.

(a) [61.343(a)(1)]
The permittee shall install, operate, and maintain a fixed-roof and closed-vent system that routes all organic vapors vented from the tank to a control device.

(i) [61.343(a)(1)(i)]
The fixed-roof shall meet the following requirements:

(aa) [61.343(a)(1)(i)(A)
The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) shall be designed to operate with no detectable emissions as indicated by an instrument reading less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h) [see section A.V.].

(bb) [61.343(a)(1)(i)(B)]
Each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that waste is in the tank except when it is

necessary to use the opening for waste sampling or removal, or for equipment inspection, maintenance, or repair.

(cc) [61.343(a)(1)(i)(C)]
If the cover and closed-vent system operate such that the tank is maintained at a pressure less than atmospheric pressure, then paragraph (a)(1)(i)(B) of 40 CFR 61.343 does not apply to any opening that meets all of the following conditions:

(aaa) [61.354(a)(1)(i)(C)(1)]
The purpose of the opening is to provide dilution air to reduce the explosion hazard;

(bbb) [61.354(a)(1)(i)(C)(2)]
The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h) [see section A.V.]; and

(ccc) [61.354(a)(1)(i)(C)(3)]
The pressure is monitored continuously to ensure that the pressure in the tank remains below atmospheric pressure.

(ii) [61.343(a)(1)(ii)]
The closed-vent system and control device shall be designed and operated in accordance with the requirement of 40 CFR 61.349 [see section A.III.].

(b) [61.343(a)(2)]
The permittee must install, operate and maintain an enclosure and closed-vent system that routes all organic vapors vented from the tank, located inside the enclosure, to an enclosed combustion control device in accordance with the requirements specified in 40 CFR 61.343(e).

ii. [61.343(b)]
For a tank that meets all the conditions specified in 40 CFR 61.343(b)(1), the permittee may elect to comply with 40 CFR 61.343(b)(2) as an alternative to the requirements specified in 40 CFR 61.343(a)(1).

(a) [61.343(b)(1)]
The waste managed in the tank complying with 40 CFR 61.343(b)(2) shall meet all of the following conditions:

(i) [61.343(b)(1)(i)]
Each waste stream managed in the tank must have a flow-weighted annual average water content less than or equal to 10 percent water, on a volume basis as total water.

(ii) [61.343(b)(1)(ii)]
The waste managed in the tank either has a maximum organic vapor pressure less than 5.2 kilopascals (kPa) (0.75 pounds per square inch (psi)); has a maximum organic vapor pressure less than 27.6 kPa (4.0 psi) and is managed in a tank having design capacity less than 151 m^3 (40,000 gal); or has a maximum organic vapor pressure less than 76.6 kPa (11.1 psi) and is managed in a tank having a design capacity less than 75 m^3 (20,000 gal).

(b) [61.343(b)(2)]
The permittee shall install, operate, and maintain a fixed roof as specified in 40 CFR 61.343(a)(1)(i).

(c) [61.343(b)(3)]
For each tank complying with 40 CFR 61.343(b), one or more devices which vent directly to the atmosphere may be used on the tank provided each device remains in a closed, sealed position during normal operations except when the device needs to open to prevent physical damage or permanent deformation of the tank or cover resulting from filling or emptying the tank, diurnal temperature changes, atmospheric pressure changes or malfunction of the unit in accordance with good engineering and safety practices for handling flammable, explosive, or other hazardous materials.

iii. [61.343(e)]
If the permittee controls air pollutant emissions by using an enclosure vented through a closed-vent system to an enclosed combustion control device, then the permittee must meet the requirements specified in paragraphs (e)(1) through (4) of 40 CFR 61.343(e).

(a) [61.343(e)(1)]
The tank must be located inside a total enclosure. The enclosure must be designed and operated in accordance with the criteria for a permanent total enclosure as specified in "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure" in 40 CFR 52.741, appendix B. The enclosure may have permanent or temporary openings to allow worker access; passage of material into or out of the enclosure by conveyor, vehicles, or other mechanical means; entry of permanent mechanical or electrical equipment; or direct airflow into the enclosure. The permittee must perform the verification procedure for the enclosure as specified in section 5.0 of Procedure T initially when the enclosure is first installed and, thereafter, annually. A facility that has conducted an initial compliance demonstration and that performs annual compliance demonstrations in accordance with the requirements for Tank Level 2 control requirements 40

CFR 264.1084(i) or 40 CFR 265(i)is not required to make repeat demonstrations of initial and continuous compliance for the purposes of this subpart.

(b) [61.343(e)(2)]
The enclosure must be vented through a closed-vent system to an enclosed combustion control device that is designed and operated in accordance with the standards for either a vapor incinerator, boiler, or process heater specified in 40 CFR 61.349.

(c) [61.343(e)(3)]
Safety devices, as defined in this subpart, may be installed and operated as necessary on any enclosure, closed-vent system, or control device used to comply with the requirements of paragraphs (e)(1) and (2) of this 40 CFR 61.343.

(d) [61.343(e)(4)]
The closed-vent system must be designed and operated in accordance with the requirements of 40 CFR 61.349.

d. [61.344] STANDARDS: SURFACE IMPOUNDMENTS

i. [61.344(a)]
The permittee shall meet the following standards for each surface impoundment in which waste is placed in accordance with 40 CFR 61.342(c)(1)(ii) [see Section A.II]:

(a) [61.344(a)(1)]
The permittee shall install, operate, and maintain on each surface impoundment a cover (e.g., air-supported structure or rigid cover) and closed-vent system that routes all organic vapors vented from the surface impoundment to a control device.

(i) [61.344(a)(1)(i)]
The cover shall meet the following requirements:

(aa) [61.344(a)(1)(i)(A)]
The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h)[see Section A.V].

(bb) [61.344(a)(1)(i)(B)]
Each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched)

at all times that waste is in the surface impoundment except when it is necessary to use the opening for waste sampling or removal, or for equipment inspection, maintenance, or repair.

(cc) [61.344(a)(1)(i)(C)]
If the cover and closed-vent system operate such that the enclosure of the surface impoundment is maintained at a pressure less than atmospheric pressure, then paragraph (a)(1)(i)(B) of 40 CFR 61.344 does not apply to any opening that meets all of the following conditions:

(aaa) [61.344(a)(1)(i)(C)(1)]
The purpose of the opening is to provide dilution air to reduce the explosion hazard;

(bbb) [61.344(a)(1)(i)(C)(2)]
The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h)[see Section A.V]; and

(ccc) [61.344(a)(1)(i)(C)(3)]
The pressure is monitored continuously to ensure that the pressure in the enclosure of the surface impoundment remains below atmospheric pressure.

(dd) [61.344(a)(1)(i)(D)]
The cover shall be used at all times that waste is placed in the surface impoundment except during removal of treatment residuals in accordance with 40 CFR 268.4 or closure of the surface impoundment in accordance with 40 CFR 264.228. (Note: the treatment residuals generated by these activities may be subject to the requirements of 40 CFR Part 61, Subpart FF.)

(ii) [61.344(a)(1)(ii)]
The closed-vent system and control device shall be designed and operated in accordance with 40 CFR 61.349 [see Section A.III].

e. [61.345(a)] STANDARDS: CONTAINERS
The permittee shall meet the following standards for each container in which waste is placed in accordance with 40 CFR 61.342(c)(1)(ii) [see section A.II.]:

i. [61.345(a)(1)]

The permittee shall install, operate, and maintain a cover on each container used to handle, transfer, or store waste in accordance with the following requirements:

(a) [61.345(a)(1)(i)]
The cover and all openings (e.g., bungs, hatches, and sampling ports) shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h) [see section A.V.].

(b) [61.345(a)(1)(ii)]
Except as provided in 40 CFR 61.345(a)(4), each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that waste is in the container except when it is necessary to use the opening for waste loading, removal, inspection, or sampling.

ii. [61.345(a)(2)]
When a waste is transferred into a container by pumping, the permittee shall perform the transfer using a submerged fill pipe. The submerged fill pipe outlet shall extend to within two fill pipe diameters of the bottom of the container while the container is being loaded. During loading of the waste, the cover shall remain in place and all openings shall be maintained in a closed, sealed position except for those openings required for the submerged fill pipe, those openings required for venting of the container to prevent physical damage or permanent deformation of the container or cover, and any openings complying with 40 CFR 61.345(a)(4).

iii. [61.345(a)(3)]
Treatment of a waste in a container, including aeration, thermal or other treatment, shall be performed by the permittee in a manner such that while the waste is being treated the container meets the standards specified in paragraphs(a)(3)(i) through (iii) of 40 CFR 61.345, except for covers and closed-vent systems that meet the requirements in 40 CFR 61.345(a)(4).

(a) [61.345(a)(3)(i)]
The permittee must either:

(i) [61.345(a)(3)(i)(A)]
Vent the container inside a total enclosure which is exhausted through a closed-vent system to a control device in accordance with the requirements of paragraphs (a)(3)(ii)(A) and (B) of 40 CFR 61.345 [see section A.II]; or

(ii) [61.345(a)(3)(i)(B)]
Vent the covered or closed container directly through a closed-vent system to a control device in accordance with the requirements of paragraphs (a)(3)(ii)(B) and (C) of 40 CFR 61.345 [see section A.II].

(b) [61.345(a)(3)(ii)]
The permittee must meet the following requirements, as applicable to the type of air emission control equipment selected by the owner or operator:

(i) [61.345(a)(3)(ii)(A)]
The total enclosure must be designed and operated in accordance with the criteria for a permanent total enclosure as specified in section 5 of the "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure" in 40 CFR 52.741, appendix B. The enclosure may have permanent or temporary openings to allow worker access; passage of containers through the enclosure by conveyor or other mechanical means; entry of permanent mechanical or electrical equipment; or direct airflow into the enclosure. The permittee must perform the verification procedure for the enclosure as specified in section 5.0 of "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure" initially when the enclosure is first installed and, thereafter, annually. A facility that has conducted an initial compliance demonstration and that performs annual compliance demonstrations in accordance with the Container Level 3 control requirements in 40 CFR 264.1086(e)(2)(i) or 40 CFR 265.1086(e)(2)(i) is not required to make repeat demonstrations of initial and continuous compliance for the purposes of 40 CFR Part 61, Subpart FF.

(ii) [61.345(a)(3)(ii)(B)]
The closed-vent system and control device must be designed and operated in accordance with the requirements of 40 CFR 61.349 [see section A.II].

(iii) [61.345(a)(3)(ii)(C)]
For a container cover, the cover and all openings (e.g., doors, hatches) must be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h) [see section A.V].

(c) [61.345(a)(3)(iii)]
Safety devices, as defined in this subpart, may be installed and operated as necessary on any container, enclosure, closed-vent system, or control device used to comply with the requirements of 40 CFR 61.345(e)(1) [see section A.II].

iv. [61.345(a)(4)]
If the cover and closed-vent system operate such that the container is maintained at a pressure less than atmospheric pressure, the permittee may operate the system with

an opening that is not sealed and kept closed at all times if the following conditions are met:

(a) [61.345(a)(4)(i)]
The purpose of the opening is to provide dilution air to reduce the explosion hazard;

(b) [61.345(a)(4)(ii)]
The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by methods specified in 40 CFR 61.355(h) [see section A.V.]; and

(c) [61.345(a)(4)(iii)]
The pressure is monitored continuously to ensure that the pressure in the container remains below atmospheric pressure.

f. [61.346] STANDARDS: INDIVIDUAL DRAIN SYSTEMS - 40 CFR Part 61, subpart FF

i. [61.346(a)]
Except as provided in 40 CFR 61.346(b), the permittee shall meet the following standards for each individual drain system in which waste is placed in accordance with 40 CFR 61.342(c)(1)(ii) [see section A.II.]:

(a) [61.346(a)(1)]
The permittee shall install, operate, and maintain on each drain system opening a cover and closed-vent system that routes all organic vapors vented from the drain system to a control device.

(i) [61.346(a)(1)(i) and (a)(1)(i)(A) through (a)(1)(i)(C)]
The cover shall meet the following requirements:

(aa) The cover and all openings (e.g., access hatches, sampling ports) shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h) [see section A.V.].

(bb) Each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that waste is in the drain system except when it is necessary to use the opening for waste sampling or removal, or for equipment inspection, maintenance, or repair.

(cc) If the cover and closed-vent system operate such that the individual drain system is maintained at a pressure less than atmospheric pressure, then 40 CFR 61.346(a)(1)(i)(B) does

not apply to any opening that meets all of the following conditions:

(aaa) The purpose of the opening is to provide dilution air to reduce the explosion hazard;

(bbb) The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 61.355(h) [see section A.V.]; and

(ccc) The pressure is monitored continuously to ensure that the pressure in the individual drain system remains below atmospheric pressure.

(ii) [61.346(a)(1)(ii)]
The closed-vent system and control device shall be designed and operated in accordance with 40 CFR 61.349 [see section A.III.].

ii. [61.346(b)]
As an alternative to complying with 40 CFR 61.346(a), the permittee may elect to comply with the following requirements:

(a) [61.346(b)(1)]
Each drain shall be equipped with water seal controls or a tightly sealed cap or plug.

(b) [61.346(b)(2)]
Each junction box shall be equipped with a cover and may have a vent pipe. The vent pipe shall be at least 90 cm (3 ft) in length and shall not exceed 10.2 cm (4 in) in diameter.

(i) [61.346(b)(2)(i)]
Junction box covers shall have a tight seal around the edge and shall be kept in place at all times, except during inspection and maintenance.

(ii) [61.346(b)(2)(ii)]
One of the following methods shall be used to control emissions from the junction box vent pipe to the atmosphere:

(aa) [61.346(b)(2)(ii)(A)]
Equip the junction box with a system to prevent the flow of organic vapors from the junction box vent pipe to the atmosphere during normal operation. An example of such a system includes use of water seal controls on the junction

box. A flow indicator shall be installed, operated, and maintained on each junction box vent pipe to ensure that organic vapors are not vented from the junction box to the atmosphere during normal operation.

(bb) [61.346(b)(2)(ii)(B)]
Connect the junction box vent pipe to a closed-vent system and control device in accordance with 40 CFR 61.349.

(c) [CFR 61.346(b)(3)]
Each sewer line shall not be open to the atmosphere and shall be covered or enclosed in a manner so as to have no visual gaps or cracks in joints, seals, or other emission interfaces.

g. [61.347(a)] STANDARDS: OIL-WATER SEPARATORS - 40 CFR Part 61, subpart FF
Except as provided in 40 CFR 61.352, the permittee shall meet the following standards for each oil-water separator in which waste is placed in accordance with 40 CFR 61.342(c)(1)(ii):

i. [61.347(a)(1)]
The permittee shall install, operate, and maintain a fixed-roof and closed-vent system that routes all organic vapors vented from the oil-water separator to a control device.

(a) [61.347(a)(1)(i)]
The fixed-roof shall meet the following requirements:

(i) [61.347(a)(1)(i)(A)]
The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h).

(ii) [61.347(a)(1)(i)(B)]
Each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that waste is in the oil-water separator except when it is necessary to use the opening for waste sampling or removal, or for equipment inspection, maintenance, or repair.

(iii) [61.347(a)(1)(i)(C)]
If the cover and closed-vent system operate such that the oil-water separator is maintained at a pressure less than atmospheric pressure, then paragraph (a)(1)(i)(B) of 40 CFR 61.347 does not apply to any opening that meets all of the following conditions:

(aa) [61.347(a)(1)(i)(C)(1)]

The purpose of the opening is to provide dilution air to reduce the explosion hazard;

(bb) [61.347(a)(1)(i)(C)(2)]
The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h); and

(cc) [61.347(a)(1)(i)(C)(3)]
The pressure is monitored continuously to ensure that the pressure in the oil-water separator remains below atmospheric pressure.

(b) [61.347(a)(1)(ii)]
The closed-vent system and control device shall be designed and operated in accordance with the requirements of 40 CFR 61.349.

h. [61.348] STANDARDS: TREATMENT PROCESSES - 40 CFR Part 61, subpart FF

i. [61.348(a)]
Except as provided in paragraph 40 CFR 61.348(a)(5), the permittee shall treat the waste stream in accordance with the following requirements:

(a) [61.348(a)(1)]
The permittee shall design, install, operate, and maintain a treatment process that either:

(i) [61.348(a)(1)(i)]
Removes benzene from the waste stream to a level less than 10 parts per million by weight (ppmw) on a flow-weighted annual average basis,

(ii) [61.348(a)(1)(ii)]
Removes benzene from the waste stream by 99 percent or more on a mass basis, or

(iii) [61.348(a)(1)(iii)]
Destroys benzene in the waste stream by incinerating the waste in a combustion unit that achieves a destruction efficiency of 99 percent or greater for benzene.

(b) [61.348(a)(2)]
Each treatment process complying with 40 CFR 61.348(a)(1)(i) or (ii) shall be designed and operated in accordance with the appropriate waste management unit standards specified in 40 CFR 61.343 through 61.347 [see sections A.II. and A.III.]. For example, if a treatment process is a tank, then

the permittee shall comply with 40 CFR 61.343 [see sections A.II. and A.III.].

(c) [61.348(a)(3)]
For the purpose of complying with the requirements specified in paragraph a.i. of 40 CFR 61.348, the intentional or unintentional reduction in the benzene concentration of a waste stream by dilution of the waste stream with other wastes or materials is not allowed.

(d) [61.348(a)(4)]
The permittee may aggregate or mix together individual waste streams to create a combined waste stream for the purpose of facilitating treatment of waste to comply with the requirements of paragraph (a)(1) of 40 CFR 61.348 except as provided by 40 CFR 61.348(a)(5).

(e) [61.348(a)(5)]
If the permittee aggregates or mixes any combination of process wastewater, product tank drawdown, or landfill leachate subject to 40 CFR 61.342(c)(1) [see section A.II.] together with other waste streams to create a combined waste stream for the purpose of facilitating management or treatment of waste in a wastewater treatment system, then the wastewater treatment system shall be operated in accordance with 40 CFR 61.348(b). These provisions apply to above-ground wastewater treatment systems as well as those that are at or below ground level.

ii. [61.348(b)]
Except for facilities complying with 40 CFR 61.342(e) the permittee that aggregates or mixes individual waste streams as defined in 61.348(a)(5) for management and treatment in a wastewater treatment system shall comply with the following requirements:

(a) [61.348(b)(1)]
The permittee shall design and operate each waste management unit that comprises the wastewater treatment system in accordance with the appropriate standards specified in 40 CFR 61.343 through 61.347 [see sections A.II. and A.III.].

(b) [61.348(b)(2)]
The provisions of 40 CFR 61.348(b)(1) do not apply to any waste management unit that the permittee demonstrates to meet the following conditions initially and, thereafter, at least once per year:

(i) [61.348(b)(2)(i)]
The benzene content of each waste stream entering the waste management unit is less than 10 ppmw on a flow-weighted annual average basis as determined by the procedures specified in 40 CFR 61.355(c) [see section A.V.]; and

(ii) [61.348(b)(2)(ii) and (b)(2)(ii)(A) and (b)(2)(ii)(B)]
The total annual benzene quantity contained in all waste streams managed or treated in exempt waste management units comprising the facility wastewater treatment systems is less than 1 Mg/yr (1.1 ton/yr). For this determination, total annual benzene quantity shall be calculated as follows:

(aa) The total annual benzene quantity shall be calculated as the sum of the individual benzene quantities determined at each location where a waste stream first enters an exempt waste management unit. The benzene quantity discharged from an exempt waste management unit shall not be included in this calculation.

(bb) The annual benzene quantity in a waste stream managed or treated in an enhanced biodegradation unit shall not be included in the calculation of the total annual benzene quantity, if the enhanced biodegradation unit is the first exempt unit in which the waste is managed or treated. A unit shall be considered enhanced biodegradation if it is a suspended-growth process that generates biomass, uses recycled biomass, and periodically removes biomass from the process. An enhanced biodegradation unit typically operates at a food-to-microorganism ratio in the range of 0.05 to 1.0 kg of biological oxygen demand per kg of biomass per day, a mixed liquor suspended solids ratio in the range of 1 to 8 grams per liter, and a residence time in the range of 3 to 36 hours.

iii. [61.348(c)]
The permittee shall demonstrate that each treatment process or wastewater treatment system unit, except as provided in 40 CFR 61.348(d), achieves the appropriate conditions specified in 40 CFR 61.348(a) or (b) in accordance with the following requirements:

(a) [61.348(c)(1)]
Engineering calculations in accordance with requirements specified in 40 CFR 61.356(e) [see section A.III.]; or

(b) [61.348(c)(2)]
Performance tests conducted using the test methods and procedures that meet the requirements specified in 40 CFR 61.355 [see section A.V.].

iv. [61.348(d)]
A treatment process or waste stream is in compliance with the requirements of 40 CFR Part 61, Subpart FF and exempt from the requirements of paragraph (c) of 40 CFR 61.348 provided that the permittee documents that the treatment process or waste stream is in compliance with other regulatory requirements as follows:

(a) [61.348(d)(1)]
The treatment process is a hazardous waste incinerator for which the permittee has been issued a final permit under 40 CFR part 270 and complies with the requirements of 40 CFR part 264, subpart O;

(b) [61.348(d)(2)]
The treatment process is an industrial furnace or boiler burning hazardous waste for energy recovery for which the permittee has been issued a final permit under 40 CFR part 270 and complies with the requirements of 40 CFR part 266, subpart D;

(c) [61.348(d)(3)]
The waste stream is treated by a means or to a level that meets benzene-specific treatment standards in accordance with the Land Disposal Restrictions under 40 CFR part 268, and the treatment process is designed and operated with a closed-vent system and control device meeting the requirements of 40 CFR 61.349;

(d) [61.348(d)(4)]
The waste stream is treated by a means or to a level that meets benzene-specific effluent limitations or performance standards in accordance with the Effluent Guidelines and Standards under 40 CFR parts 401-464, and the treatment process is designed and operated with a closed-vent system and control device meeting the requirements of 40 CFR 61.349; or

(e) [61.348(d)(5)]
The waste stream is discharged to an underground injection well for which the permittee has been issued a final permit under 40 CFR part 270 and complies with the requirements of 40 CFR part 122.

v. [61.348(e)]
Except as specified in 40 CFR 61.348(e)(3), if the treatment process or wastewater treatment system unit has any openings (e.g., access doors, hatches, etc.), all such openings shall be sealed (e.g., gasketed, latched, etc.) and kept closed at all times when waste is being treated, except during inspection and maintenance.

(a) [61.348(e)(3)]
If the cover and closed-vent system operate such that the treatment process and wastewater treatment system unit are maintained at a pressure less than atmospheric pressure, the permittee may operate the system with an opening that is not sealed and kept closed at all times if the following conditions are met:

(i) [61.348(e)(3)(i)]
The purpose of the opening is to provide dilution air to reduce the explosion hazard;

(ii) [61.348(e)(3)(ii)]

The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h) [see section A.V.]; and

(iii) [61.348(e)(3)(iii)]
The pressure is monitored continuously to ensure that the pressure in the treatment process and wastewater treatment system unit remain below atmospheric pressure.

vi. [61.348(f)]
Except for treatment processes complying with 40 CFR 61.348(d), the Administrator may request at any time a permittee demonstrate that a treatment process or wastewater treatment system unit meets the applicable requirements specified in 40 CFR 61.348(a) or 61.348(b) by conducting a performance test using the test methods and procedures as required in 40 CFR 61.355(h) [see section A.V.].

i. [61.349] STANDARDS: CLOSED VENT SYSTEMS AND CONTROL DEVICES - 40 CFR Part 61, Subpart FF

i. [61.349(a)]
For each closed-vent system and control device used to comply with standards in accordance with 40 CFR 61.343 through 61.348 [see sections A.II. and A.III.], the permittee shall properly design, install, operate, and maintain the closed-vent system and control device in accordance with the following requirements:

(a) [61.349(a)(1)]
The closed-vent system shall:

(i) [61.349(a)(1)(i)]
Be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 40 CFR 61.355(h) [see section A.V.].

(ii) [61.349(a)(1)(ii); (a)(1)(ii)(A) and (a)(1)(ii)(B)]
Vent systems that contain any bypass line that could divert the vent stream away from a control device used to comply with the provisions of 40 CFR Part 61, Subpart FF shall install, maintain, and operate according to the manufacturer's specifications a flow indicator that provides a record of vent stream flow away from the control device at least once every 15 minutes, except as provided in paragraph (a)(1)(ii)(B) of 40 CFR 61.349.

(aa) The flow indicator shall be installed at the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere.

(bb) Where the bypass line valve is secured in the closed position with a car-seal or a lock-and-key type configuration, a flow indicator is not required.

(iii) [61.349(a)(1)(iii)]
All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

(iv) [61.349(a)(1)(iv)]
For each closed-vent system complying with 40 CFR 61.349(a), one or more devices which vent directly to the atmosphere may be used on the closed-vent system provided each device remains in a closed, sealed position during normal operations except when the device needs to open to prevent physical damage or permanent deformation of the closed-vent system resulting from malfunction of the unit in accordance with good engineering and safety practices for handling flammable, explosive, or other hazardous materials.

(b) [61.349(a)(2)]
The control device shall be designed and operated in accordance with the following conditions:

(i) [61.349(a)(2)(i)]
An enclosed combustion device (e.g., a vapor incinerator, boiler, or process heater) shall meet one of the following conditions:

(aa) Reduce the organic emissions vented to it by 95 weight percent or greater;

(bb) Achieve a total organic compound concentration of 20 ppmv (as the sum of the concentrations for individual compounds using Method 18) on a dry basis corrected to 3 percent oxygen; or

(cc) Provide a minimum residence time of 0.5 seconds at a minimum temperature of 760°C (1,400 °F). If a boiler or process heater issued as the control device, then the vent stream shall be introduced into the flame zone of the boiler or process heater.

(ii) [61.349(a)(2)(ii)]
A vapor recovery system (e.g., a carbon adsorption system or a condenser) shall recover or control the organic emissions vented to it with an efficiency of 95 weight percent or greater, or shall recover or control the benzene emissions vented to it with an efficiency of 98 weight percent or greater.

(iii) [61.349(a)(2)(iii)]

A flare shall comply with the requirements of 40 CFR 60.18.

(iv) [61.349(a)(2)(iv)]
A control device other than those described in paragraphs (a)(2)(i) through (iii) of 40 CFR 61.349 may be used provided that the following conditions are met:

(aa) [61.349(a)(2)(iv)(A)]
The device shall recover or control the organic emissions vented to it with an efficiency of 95 weight percent or greater, or shall recover or control the benzene emissions vented to it with an efficiency of 98 weight percent or greater.

(bb) [61.349(a)(2)(iv)(B)]
The permittee shall develop test data and design information that documents the control device will achieve an emission control efficiency of either 95 percent or greater for organic compounds or 98 percent or greater for benzene.

(cc) [61.349(a)(2)(iv)(C)]
The permittee shall identify:

(aaa) [61.349(a)(2)(iv)(C)(1)]
The critical operating parameters that affect the emission control performance of the device;

(bbb) [61.349(a)(2)(iv)(C)(2)]
The range of values of these operating parameters that ensure the emission control efficiency specified in paragraph (a)(2)(iv)(A) of 40 CFR 61.349 is maintained during operation of the device; and

(ccc) [61.349(a)(2)(iv)(C)(3)]
How these operating parameters will be monitored to ensure the proper operation and maintenance of the device.

(dd) [61.349(a)(2)(iv)(D)]
The permittee shall submit the information and data specified in 61.349(a)(2)(iv)(B) and (C) to the Administrator of U.S. EPA prior to operation of the alternative control device.

(ee) [61.349(a)(2)(iv)(E)]
The Administrator of U.S. EPA will determine, based on the information submitted under paragraph (a)(2)(iv)(D) of 40

CFR 61.349, if the control device subject to paragraph (a)(2)(iv) of 40 CFR 61.349 meets the requirements of 40 CFR 61.349. The control device subject to paragraph (a)(2)(iv) of 40 CFR 61.349 may be operated prior to receiving approval from the Administrator of USEPA. However, if the Administrator of USEPA determines that the control device does not meet the requirements of 40 CFR 61.349, the facility may be subject to enforcement action beginning from the time the control device began operation.

ii. [61.349(b)]
Each closed-vent system and control device used to comply with 40 CFR Part 61, Subpart FF shall be operated at all times when waste is placed in the waste management unit vented to the control device except when maintenance or repair of the waste management unit cannot be completed without a shutdown of the control device.

iii. [61.349(c)]
The permittee shall demonstrate that each control device, except for a flare, achieves the appropriate conditions specified in 40 CFR 61.349(a)(2) by using one of the following methods:

(a) [61.349(c)(1)]
Engineering calculations in accordance with requirements specified in 40 CFR 61.356(f) [see section A.III.]; or

(b) [61.349(c)(2)]
Performance tests conducted using the test methods and procedures that meet the requirements specified in 40 CFR 61.355 [see section A.V.].

iv. [61.349(d)]
The permittee shall demonstrate compliance of each flare in accordance with 61.349(a)(2)(iii).

v. [61.349(e)]
The Administrator may request at any time a permittee demonstrate that a control device meets the applicable conditions specified in 40 CFR 61.349(a)(2) by conducting a performance test using the test methods and procedures as required in 40 CFR 61.355 [see section A.V.], and for control devices subject to 40 CFR 61.349(a)(2)(iv), the Administrator may specify alternative test methods and procedures, as appropriate

j. [61.351] ALTERNATIVE STANDARDS FOR TANKS - 40 CFR Part 61, Subpart FF

i. [61.351(a)]
As an alternative to the standards for tanks specified in 40 CFR 61.343 [see section A.II.], the permittee may elect to comply with one of the following:

(a) [61.351(a)(1)]
A fixed roof and internal floating roof meeting the requirements in 40 CFR 60.112b(a)(1);

(b) [61.351(a)(2)]
An external floating roof meeting the requirements of 40 CFR 60.112b(a)(2); or

(c) [61.351(a)(3)]
An alternative means of emission limitation as described in 40 CFR 60.114b.

ii. [61.351(b)]
If the permittee elects to comply with the provisions of 40 CFR 61.351, then the permittee is exempt from the provisions of 40 CFR 61.343 [see section A.II.] applicable to the same facilities.

k. [61.352] Alternative standards for oil-water separators

i. [61.352(a)]
As an alternative to the standards for oil-water separators specified in 40 CFR 61.347, the permittee may elect to comply with one of the following:

(a) [63.652(a)(1)]
A floating roof meeting the requirements in 40 CFR 60.693-2(a); or

(b) [63.654(a)(2)]
An alternative means of emission limitation as described in 40 CFR 60.694.

ii. [61.352(b)]
For portions of the oil-water separator where it is infeasible to construct and operate a floating roof, such as over the weir mechanism, a fixed roof vented to a vapor control device that meets the requirements in 40 CFR 61.347 and 61.349 shall be installed and operated.

iii. [61.352(c)]
Except as provided in paragraph (b) of 40 CFR 61.352, if the permittee elects to comply with the provisions of 40 CFR 61.352, then the permittee is exempt from the provisions in 40 CFR 61.347 applicable to the same facilities.

l. [61.353] Alternative means of emission limitation - 40 CFR Part 61, Subpart FF

i. [61.353(a)]
If, in the Administrator of U.S. EPA's judgment, an alternative means of emission limitation will achieve a reduction in benzene emissions at least equivalent to the reduction in benzene emissions from the source achieved by the applicable design, equipment, work practice, or operational requirements in 40 CFR Part 61.342 through 61.349, the Administrator of U.S. EPA will publish in the Federal Register a notice permitting the use of the alternative means for purposes of compliance with

that requirement. The notice may condition the permission on requirements related to the operation and maintenance of the alternative means.

ii. [61.353(b)]
Any notice under paragraph (a) of 40 CFR 61.353 shall be published only after public notice and an opportunity for a hearing.

iii. [61.353(c)]
Any person seeking permission under 40 CFR 61.353 shall collect, verify, and submit to the Administrator information showing that the alternative means achieves equivalent emission reductions.

3. 40 CFR Part 60, Subpart QQQ

a. [60.692-1] STANDARDS: General

i. [60.692-1(c)]
Permission to use alternative means of emission limitation to meet the requirements of 40 CFR 60.692-2 through 60.692-4 may be granted as provided in 40 CFR 60.694.

ii. [60.692-1(d)(1)]
Stormwater sewer systems are not subject to the requirements of 40 CFR Part 60, Subpart QQQ.

iii. [60.692-1(d)(2)]
Ancillary equipment, which is physically separate from the wastewater system and does not come in contact with or store oily wastewater, is not subject to the requirements of 40 CFR Part 60, Subpart QQQ.

iv. [60.692-1(d)(3)]
Non-contact cooling water systems are not subject to the requirements of 40 CFR Part 60, Subpart QQQ.

v. [60.692-1(d)(4)]
The permittee shall demonstrate compliance with the exclusions in paragraphs (d)(1), (2), and (3) of 60.692-1 as provided in 40 CFR 60.697(h), (i), and (j) see section A.III].

b. [60.692-2] STANDARDS: Individual Drain Systems - 40 CFR Part 60, Subpart QQQ

i. [60.692-2(a)(1)]
Each drain shall be equipped with water seal controls.

ii. [60.692-2(b)(1)]
Junction boxes shall be equipped with a cover and may have an open vent pipe. The vent pipe shall be at least 90 cm (3 ft) in length and shall not exceed 10.2 cm (4 in) in diameter.

iii. [60.692-2(b)(2)]
Junction box covers shall have a tight seal around the edge and shall be kept in place at all times, except during inspection and maintenance.

iv. [60.692-2(c)]
Sewer lines shall not be open to the atmosphere and shall be covered or enclosed in a manner so as to have no visual gaps or cracks in joints, seals, or other emission interfaces.

v. [60.692-2(d)]
Except as provided in paragraph (e) of 40 CFR 60.692, each modified or reconstructed individual drain system that has a catch basin in the existing configuration prior to May 4, 1987 shall be exempt from the provisions 40 CFR 60.692-2.

vi. [60.692-2(e)]
Refinery wastewater routed through new process drains and a new first common downstream junction box, either as part of a new individual drain system or an existing individual drain system, shall not be routed through a downstream catch basin.

vii. According to the permittee, the following individual drain systems (IDS) are subject to 40 CFR Part 60, Subpart QQQ:

(a) IDS 1 - dikes around Tanks 127 and 128, trucks, terminal, and marine (TTM) area, and portions of the wastewater treatment plant(WWTP).

(b) IDS 2 - five dikes of the Blender Tank Farm

(c) IDS 3 - dike area around Tanks 112, 238, 130, and 250

(d) IDS 6 - dikes for Tanks 1, 55, 74, 234, 241, 52, 51, 2, and 235

(e) IDS 15 - back pump pit

(f) IDS 16 - TTM control room at the loading rack

The applicability of these IDS are subject to confirmation during subsequent inspections of the facility.

c. [60.692-3] STANDARDS: Oil-water separators - 40 CFR Part 60, Subpart QQQ

i. [60.692-3(a)]
Each oil-water separator tank, slop oil tank, storage vessel, or other auxiliary equipment subject to the requirements of this subpart shall be equipped and operated with a fixed roof, which meets the following specifications, except as provided in 40 CFR 60.692-3(d) or in 40 CFR 60.693-2.

(a) [60.692-3(a)(1)]
The fixed roof shall be installed to completely cover the separator tank, slop oil tank, storage vessel, or other auxiliary equipment with no separation between the roof and the wall.

(b) [60.692-3(a)(2)]
The vapor space under a fixed roof shall not be purged unless the vapor is directed to a control device.

(c) [60.692-3(a)(3)]
If the roof has access doors or openings, such doors or openings shall be gasketed, latched, and kept closed at all times during operation of the separator system, except during inspection and maintenance.

ii. [60.692-3(b)]
Each oil-water separator tank or auxiliary equipment with a design capacity to treat more than 16 liters per second (250 gallons per minute (gpm)) of refinery wastewater shall, in addition to the requirements in paragraph (a) of 40 CFR 60.692-3, be equipped and operated with a closed vent system and control device, which meet the requirements of 40 CFR 60.692-5, except as provided in paragraph (c) of 40 CFR 60.692-3 or in 40 CFR 60.693-2.

iii. [60.692-3(c)]
Each modified or reconstructed oil-water separator tank with a maximum design capacity to treat less than 38 liters per second (600 gpm) of refinery wastewater which was equipped and operated with a fixed roof covering the entire separator tank or a portion of the separator tank prior to May 4, 1987 shall be exempt from the requirements of 40 CFR 60.692-3(b), but shall meet the requirements of 40 CFR 60.692-3(a), or may elect to comply with 40 CFR 60.692-3(c)(2).

iv. [60.692-3(c)(2)]
The permittee may elect to comply with the requirements of 40 CFR 60.692-3(a) for the existing fixed roof covering a portion of the separator tank and comply with the requirements for floating roofs in 40 CFR 60.693-2 for the remainder of the separator tank.

v. [60.692-3(d)]
Storage vessels, including slop oil tanks and other auxiliary tanks that are subject to the requirements of 40 CFR subparts K, Ka, or Kb, are not subject to the requirements of 40 CFR 60.692-3.

vi. [60.692-3(e)]
Slop oil from an oil-water separator tank and oily wastewater from slop oil handling equipment shall be collected, stored, transported, recycled, reused, or disposed of in an enclosed system. Once slop oil is returned to the process unit or is disposed of, it is no longer within the scope of this subpart. Equipment used in handling slop oil shall be equipped with a fixed roof meeting the requirements of 40 CFR 60.692-3(a).

vii. [60.692-3(f)]
Each oil-water separator tank, slop oil tank, storage vessel, or other auxiliary equipment that is required to comply with 40 CFR 60.692-3(a), and not 40 CFR 60.692-3(b), may be equipped with a pressure control valve as necessary for proper system operation. The pressure control valve shall be set at the maximum pressure necessary for proper system operation, but such that the value will not vent continuously.

viii. According to the permittee, OWS - API separator, Tank 8 Sump, Tanks 8, 235, 246, 247, 270 and 14-F-17 are subject to 40 CFR Part 60, subpart QQQ. The applicability of these IDS are subject to confirmation during subsequent inspections of the facility.

d. [60.692-4] Standards: Aggregate facility - 40 CFR Part 60, Subpart QQQ
A new, modified, or reconstructed aggregate facility shall comply with the requirements of 40 CFR 60.692-2 and 60.692-3.

e. [60.692-5]
Standards: Closed vent systems and control devices - 40 CFR Part 60, Subpart QQQ

i. [60.692-5(a)]
Enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816°C (1,500°F).

ii. [60.692-5(b)]
Vapor recovery systems (for example, condensers and adsorbers) shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater.

iii. 40 CFR 60.692-5(c)
Flares used to comply with this subpart shall comply with the requirements of 40 CFR 60.18.

iv. [60.692-5(d)]
Closed vent systems and control devices used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.

v. [60.692-5(e)(1)]
Closed vent systems shall be designed and operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined during the initial and semiannual inspections by the methods specified in 40 CFR 60.696 [see section A.V].

vi. [60.692-5(e)(2)]
Closed vent systems shall be purged to direct vapor to the control device.

vii. [60.692-5(e)(3)]
A flow indicator shall be installed on a vent stream to a control device to ensure that the vapors are being routed to the device.

viii. [60.692-5(e)(4)]
All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

ix. [60.692-5(e)(5)]
When emissions from a closed system are detected, first efforts at repair to eliminate the emissions shall be made as soon as practicable, but not later than 30 calendar days from the date the emissions are detected, except as provided in 40 CFR 60.692-6 [see section A.III].

f. [60.692-7] Standards: Delay of compliance.

i. [60.692-7(a)]
Delay of compliance of modified individual drain systems with ancillary downstream treatment components will be allowed if compliance with the provisions of this subpart cannot be achieved without a refinery or process unit shutdown.

ii. [60.692-7(b)]
Installation of equipment necessary to comply with the provisions of 40 CFR Part 60, Subpart QQQ shall occur no later than the next scheduled refinery or process unit shutdown.

g. [60.693-1] Alternative standards for individual drain systems.

i. [60.693-1(a)]
The permittee may elect to construct and operate a completely closed drain system.

ii. [60.693-1(b)]
Each completely closed drain system shall be equipped and operated with a closed vent system and control device complying with the requirements of 40 CFR 60.692-5.

iii. [60.693-1(c)]
The permittee must notify the Administrator in the report required in 40 CFR 60.7 that the permittee has elected to construct and operate a completely closed drain system.

iv. [60.693-1(d)]
If the permittee elects to comply with the provisions of 40 CFR 60.693-1, then the permittee does not need to comply with the provisions of 40 CFR 60.692-2 or 60.694.

v. [60.693-1(e)(1)]

Sewer lines shall not be open to the atmosphere and shall be covered or enclosed in a manner so as to have no visual gaps or cracks in joints, seals, or other emission interfaces.

h. [60.693-2] Alternative standards for oil-water separators.

i. [60.693-2(a)]
The permittee may elect to construct and operate a floating roof on an oil-water separator tank, slop oil tank, storage vessel, or other auxiliary equipment subject to the requirements of this subpart which meets the following specifications.

(a) [60.693-2(a)(1)]
Each floating roof shall be equipped with a closure device between the wall of the separator and the roof edge. The closure device is to consist of a primary seal and a secondary seal.

(i) [60.693-2(a)(1)(i)]
The primary seal shall be a liquid-mounted seal.

(aa) [60.693-2(a)(1)(i)(A)]
A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the separator and the floating roof.

(bb) [60.693-2(a)(1)(i)(B)]
The gap width between the primary seal and the separator wall shall not exceed 3.8 cm (1.5 in.) at any point.

(cc) [60.693-2(a)(1)(i)(C)]
The total gap area between the primary seal and the separator wall shall not exceed 67 cm2/m (3.2 in.2/ft) of separator wall perimeter.

(ii) [60.693-2(a)(1)(ii)]
The secondary seal shall be above the primary seal and cover the annular space between the floating roof and the wall of the separator.

(aa) [60.693-2(a)(1)(ii)(A)]
The gap width between the secondary seal and the separator wall shall not exceed 1.3 cm (0.5 in.) at any point.

(bb) [60.693-2(a)(1)(ii)(B)]
The total gap area between the secondary seal and the separator wall shall not exceed 6.7 cm2/m (0.32 in.2/ft) of separator wall perimeter.

(b) [60.693-2(a)(2)]

Except as provided in40 CFR 60.693-2(a)(4), each opening in the roof shall be equipped with a gasketed cover, seal, or lid, which shall be maintained in a closed position at all times, except during inspection and maintenance.

(c) [60.693-2(a)(3)]
The roof shall be floating on the liquid (i.e., off the roof supports) at all times except during abnormal conditions (i.e., low flow rate).

(d) [60.693-2(a)(4)]
The floating roof may be equipped with one or more emergency roof drains for removal of stormwater. Each emergency roof drain shall be fitted with a slotted membrane fabric cover that covers at least 90 percent of the drain opening area or a flexible fabric sleeve seal.

ii. [60.693-2(b)]
The permittee must notify the Administrator in the report required by 40 CFR 60.7 that the permittee has elected to construct and operate a floating roof under 40 CFR 60.693-2(a).

iii. [60.693-2(c)]
For portions of the oil-water separator tank where it is infeasible to construct and operate a floating roof, such as the skimmer mechanism and weirs, a fixed roof meeting the requirements of 40 CFR 60.692-3(a) shall be installed.

iv. [60.693-2(d)]
Except as provided in 40 CFR 60.693-2(c), if the permittee elects to comply with the provisions of 40 CFR 60.693-2, then the permittee does not need to comply with the provisions of 40 CFR 60.692-3 or 60.694 applicable to the same facilities.

i. [60.694] Permission to use alternative means of emission limitation 40 CFR Part 60, Subpart QQQ

i. [60.694(a)]
If, in the Administrator's judgment, an alternative means of emission limitation will achieve a reduction in VOC emissions at least equivalent to the reduction in VOC emissions achieved by the applicable requirement in 40 CFR 60.692, the Administrator will publish in the FEDERAL REGISTER a notice permitting the use of the alternative means for purposes of compliance with that requirement. The notice may condition the permission on requirements related to the operation and maintenance of the alternative means.

ii. [60.694(b)]
Any notice under 40 CFR 60.694(a) shall be published only after notice and an opportunity for a hearing.

iii. [60.694(c)]

Any person seeking permission under this section shall collect, verify, and submit to the Administrator information showing that the alternative means achieves equivalent emission reductions.

III. Monitoring and/or Record Keeping Requirements

1. 40 CFR Part 63, Subpart CC

   a. Each permittee subject to the wastewater provisions in 40 CFR 63.647 [see section A.II.] shall comply with the record keeping and reporting provisions in 40 CFR 61.356 and 61.357 of 40 CFR Part 61, subpart FF [see sections A.III. and A.IV.] unless they are complying with the wastewater provisions specified in 40 CFR 63.640(o)(2)(ii). There are no additional reporting and record keeping requirements for wastewater under this subpart unless a wastewater stream is included in an emissions average.

   b. Miscellaneous Process Vents
   See the applicable sections in Part II for miscellaneous process vents in A.III., referencing 40 CFR Part 63, Subpart CC.

2. 40 CFR Part 61, Subpart FF - National Emission Standard for Benzene Waste Operations

   a. [61.343] STANDARDS: TANKS

      i. [61.343(c)]
      Each fixed-roof, seal, access door, and all other openings shall be checked by visual inspection initially and quarterly thereafter to ensure that no cracks or gaps occur and that access doors and other openings are closed and gasketed properly.

      ii. [61.343(d)]
      Except as provided in 40 CFR 61.350 [see section A.III.], when a broken seal or gasket or other problem is identified, or when detectable emissions are measured, first efforts at repair shall be made as soon as practicable, but not later than 45 calendar days after identification.

   b. [61.344] STANDARDS: SURFACE IMPOUNDMENTS - 40 CFR Part 61, Subpart FF

      i. [61.344(b)]
      Each cover seal, access hatch, and all other openings shall be checked by visual inspection initially and quarterly thereafter to ensure that no cracks or gaps occur and that access hatches and other openings are closed and gasketed properly.

      ii. [61.344(c)]
      Except as provided in 40 CFR 61.350 [see Section A.III], when a broken seal or gasket or other problem is identified, or when detectable emissions are measured, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after identification.

   c. [61.345] STANDARDS: CONTAINERS - 40 CFR Part 61, subpart FF

i. [61.345(b)]
Each cover and all openings shall be visually inspected initially and quarterly thereafter to ensure that they are closed and gasketed properly.

ii. [61.345(c)]
Except as provided in 40 CFR 61.350 [see section A.III.], when a broken seal or gasket or other problem is identified, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after identification.

d. [61.346] STANDARDS: INDIVIDUAL DRAIN SYSTEMS - 40 CFR Part 61, Subpart FF

i. [61.346(a)(2)]
Each cover seal, access hatch, and all other openings shall be checked by visual inspection initially and quarterly thereafter to ensure that no cracks or gaps occur and that access hatches and other openings are closed and gasketed properly.

ii. [61.346(a)(3)]
Except as provided in 40 CFR 61.350 [see section A.III.], when a broken seal or gasket or other problem is identified, or when detectable emissions are measured, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after identification.

iii. [61.346(b)(4)]
If the permittee elects to comply with the alternative standards under 40 CFR 61.346(b) [see Section A.III], then the permittee shall inspect the equipment installed under 40 CFR 63.646(b)(1), (b)(2), or (b)(3) as follows in lieu of 40 CFR 61.346(a)(2) and (a)(3):

(a) [63.646(b)(4)(i)]
Each drain using water seal controls shall be checked by visual or physical inspection initially and thereafter quarterly for indications of low water levels or other conditions that would reduce the effectiveness of water seal controls.

(b) [61.346(b)(4)(ii)]
Each drain using a tightly sealed cap or plug shall be visually inspected initially and thereafter quarterly to ensure caps or plugs are in place and properly installed.

(c) [61.346(b)(4)(iii)]
Each junction box shall be visually inspected initially and thereafter quarterly to ensure that the cover is in place and to ensure that the cover has a tight seal around the edge.

(d) [61.346(b)(4)(iv)]
The unburied portion of each sewer line shall be visually inspected initially and thereafter quarterly for indication of cracks, gaps, or other problems that could result in benzene emissions.

(e) [61.346(b)(5)]
Except as provided in 40 CFR 61.350 [see Section A.III], when a broken seal, gap, crack or other problem is identified, first efforts at repair shall be

made as soon as practicable, but not later than 15 calendar days after identification.

e. [61.347] STANDARDS: Oil-Water Separators

i. [61.347(b)]
Each cover seal, access hatch, and all other openings shall be checked by visual inspection initially and quarterly thereafter to ensure that no cracks or gaps occur between the cover and oil-water separator wall and that access hatches and other openings are closed and gasketed properly.

ii. [61.347(c)]
Except as provided in 40 CFR 61.350, when a broken seal or gasket or other problem is identified, or when detectable emissions are measured, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after identification.

f. [61.348] STANDARDS: TREATMENT PROCESSES - 40 CFR Part 61, Subpart FF

i. [61.348(e)(1)]
Each seal, access door, and all other openings shall be checked by visual inspections initially and quarterly thereafter to ensure that no cracks or gaps occur and that openings are closed and gasketed properly.

ii. [61.348(e)(2)]
Except as provided in 40 CFR 61.350 [see section A.III.], when a broken seal or gasket or other problem is identified, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after identification.

iii. [61.348(g)]
The permittee of a treatment process or wastewater treatment system unit that is used to comply with the provisions of 40 CFR 61.348 shall monitor the unit in accordance with the applicable requirements in 40 CFR 61.354 [see section A.III.].

g. [61.349] STANDARDS: CLOSED VENT SYSTEMS- 40 CFR Part 61, Subpart FF

i. [61.349(f)]
Each closed-vent system and control device shall be visually inspected initially and quarterly thereafter. The visual inspection shall include inspection of ductwork and piping and connections to covers and control devices for evidence of visible defects such as holes in ductwork or piping and loose connections.

ii. [61.349(g)]
Except as provided in 61.350 [see section A.III.], if visible defects are observed during an inspection, or if other problems are identified, or if detectable emissions are measured, a first effort to repair the closed-vent system and control device shall be made as soon as practicable but no later than 5 calendar days after detection.

Repair shall be completed no later than 15 calendar days after the emissions are detected or the visible defect is observed.

iii. [61.349(h)]
The permittee of a control device that is used to comply with the provisions of 40 CFR 61.349 shall monitor the control device in accordance with 40 CFR 61.354(c) [see Section A.III].

h. [61.350] STANDARDS: DELAY OF REPAIR - 40 CFR Part 61, Subpart FF

i. [61.350(a)]
Delay of repair of facilities or units that are subject to the provisions will be allowed if the repair is technically impossible without a complete or partial facility or unit shutdown.

ii. [61.350(b)]
Repair of such equipment shall occur before the end of the next facility or unit shutdown.

i. [61.354] MONITORING OF OPERATIONS - 40 CFR Part 61, Subpart FF

i. [61.354(a)]
Except for a treatment process or waste stream complying with 40 CFR 61.348(d), the permittee shall monitor each treatment process or wastewater treatment system unit to ensure the unit is properly operated and maintained by one of the following monitoring procedures:

(a) [61.354(a)(1)]
Measure the benzene concentration of the waste stream exiting the treatment process complying with 40 CFR 61.348(a)(1)(i) [see section A.II] at least once per month by collecting and analyzing one or more samples using the procedures specified in 40 CFR 61.355(c)(3) [see section A.V].

(b) [61.354(a)(2)]
Install, calibrate, operate, and maintain according to manufacturer's specifications equipment to continuously monitor and record a process parameter (or parameters) for the treatment process or wastewater treatment system unit that indicates proper system operation. The permittee shall inspect at least once each operating day the data recorded by the monitoring equipment (e.g., temperature monitor or flow indicator) to ensure that the unit is operating properly.

ii. [61.354(b)]
If a permittee complies with the requirements of 40 CFR 61.348(b) [see section A.II.], then the permittee shall monitor each wastewater treatment system to ensure the unit is properly operated and maintained by the appropriate monitoring procedure as follows:

(a) [61.354(b)(1)]
For the first exempt waste management unit in each waste treatment train, other than an enhanced biodegradation unit, measure the flow rate, using the procedures of 40 CFR 61.355(b) [see section A.V.], and the benzene concentration of each waste stream entering the unit at least once per month by collecting and analyzing one or more samples using the procedures specified in 40 CFR 61.355(c)(3) [see section A.V.].

(b) [61.354(b)(2)]
For each enhanced biodegradation unit that is the first exempt waste management unit in a treatment train, measure the benzene concentration of each waste stream entering the unit at least once per month by collecting and analyzing one or more samples using the procedures specified in 40 CFR 61.355(c)(3) [see section A.V.].

iii. [61.354(c)]
The permittee subject to the requirements in 40 CFR 61.349 [see section A.II] shall install, calibrate, maintain, and operate according to the manufacturer's specifications a device to continuously monitor the control device operation as specified in the following paragraphs, unless alternative monitoring procedures or requirements are approved for that facility by the Administrator of USEPA. The permittee shall inspect at least once each operating day the data recorded by the monitoring equipment (e.g., temperature monitor or flow indicator) to ensure that the control device is operating properly.

(a) [61.354(c)(1)]
For a thermal vapor incinerator, a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of ±1 percent of the temperature being monitored in °C or ±0.5°C, whichever is greater. The temperature sensor shall be installed at a representative location in the combustion chamber.

(b) [61.354(c)(2)]
For a catalytic vapor incinerator, a temperature monitoring device equipped with a continuous recorder. The device shall be capable of monitoring temperature at two locations, and have an accuracy of ±1 percent of the temperature being monitored in °C or ±0.5°C, whichever is greater. One temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed inlet and a second temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed outlet.

(c) [61.354(c)(3)]
For a flare, a monitoring device in accordance with 40 CFR 60.18(f)(2) equipped with a continuous recorder.

(d) [61.354(c)(4)]

For a boiler or process heater having a design heat input capacity less than 44 MW (150 x 10^6 Btu), a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of ±1 percent of the temperature being monitored in °C or ±0.5°C, whichever is greater. The temperature sensor shall be installed at a representative location in the combustion chamber.

(e) [61.354(c)(5)]
For a boiler or process heater having a design heat input capacity greater than or equal to 44 MW (150 x 10^6 Btu), a monitoring device equipped with a continuous recorder to measure a parameter(s) that indicates good combustion operating practices are being used.

(f) [61.354(c)(6)]
For a condenser, either:

(i) [61.354(c)(6)(i)]
A monitoring device equipped with a continuous recorder to measure either the concentration level of the organic compounds or the concentration level of benzene in the exhaust vent stream from the condenser; or

(ii) [CFR 61.354(c)(6)(ii)]
A temperature monitoring device equipped with a continuous recorder. The device shall be capable of monitoring temperature at two locations, and have an accuracy of ±1 percent of the temperature being monitored in °C or ±0.5°C, whichever is greater. One temperature sensor shall be installed at a location in the exhaust stream from the condenser, and a second temperature sensor shall be installed at a location in the coolant fluid exiting the condenser.

(g) [61.354(c)(7)]
For a carbon adsorption system that regenerates the carbon bed directly in the control device such as a fixed-bed carbon adsorber, either:

(i) [61.354(c)(7)(i)]
A monitoring device equipped with a continuous recorder to measure either the concentration level of the organic compounds or the benzene concentration level in the exhaust vent stream from the carbon bed; or

(ii) [61.354(c)(7)(ii)]
A monitoring device equipped with a continuous recorder to measure a parameter that indicates the carbon bed is regenerated on a regular, predetermined time cycle.

(h) [61.354(c)(8)]

For a vapor recovery system other than a condenser or carbon adsorption system, a monitoring device equipped with a continuous recorder to measure either the concentration level of the organic compounds or the benzene concentration level in the exhaust vent stream from the control device.

(i) [61.354(c)(9)]
For a control device subject to the requirements of 40 CFR 61.349(a)(2)(iv) [see section A.II], devices to monitor the parameters as specified in 40 CFR 61.349(a)(2)(iv)(C).

iv. [61.354(d)]
For a carbon adsorption system that does not regenerate the carbon bed directly on site in the control device (e.g., a carbon canister), either the concentration level of the organic compounds or the concentration level of benzene in the exhaust vent stream from the carbon adsorption system shall be monitored on a regular schedule, and the existing carbon shall be replaced with fresh carbon immediately when carbon breakthrough is indicated. The device shall be monitored on a daily basis or at intervals no greater than 20 percent of the design carbon replacement interval, whichever is greater. As an alternative to conducting this monitoring, a permittee may replace the carbon in the carbon adsorption system with fresh carbon at a regular predetermined time interval that is less than the carbon replacement interval that is determined by the maximum design flow rate and either the organic concentration or the benzene concentration in the gas stream vented to the carbon adsorption system.

v. [61.354(e)]
An alternative operation or process parameter may be monitored if it can be demonstrated that another parameter will ensure that the control device is operated in conformance with these standards and the control device's design specifications.

vi. [61.354(f)]
The permittee using a closed-vent system that contains any bypass line that could divert a vent stream from a control device used to comply with the provisions of 40 CFR Part 61, Subpart FF shall do the following:

(a) [61.354(f)(1)]
Visually inspect the bypass line valve at least once every month, checking the position of the valve and the condition of the car-seal or closure mechanism required under 40 CFR 61.349(a)(1)(ii) [see section A.II] to ensure that the valve is maintained in the closed position and the vent stream is not diverted through the bypass line.

(b) [61.354(f)(2)]
Visually inspect the readings from each flow monitoring device required by 40 CFR 61.349(a)(1)(ii) at least once each operating day to check that vapors are being routed to the control device as required.

vii. [61.354(g)]

Each permittee who uses a system for emission control that is maintained at a pressure less than atmospheric pressure with openings to provide dilution air shall install, calibrate, maintain, and operate according to the manufacturer's specifications a device equipped with a continuous recorder to monitor the pressure in the unit to ensure that it is less than atmospheric pressure.

j. [61.356] RECORD KEEPING REQUIREMENTS - 40 CFR Part 61, Subpart FF

i. [61.356(a)]
The permittee shall comply with the record keeping requirements of 40 CFR 61.356. Each record shall be maintained in a readily accessible location at the facility site for a period not less than two years from the date the information is recorded unless otherwise specified.

ii. [61.356(b)]
The permittee shall maintain records that identify each waste stream at the facility subject to 40 CFR Part 61, Subpart FF, and indicate whether or not the waste stream is controlled for benzene emissions in accordance with this subpart. In addition the permittee shall maintain the following records:

(a) [61.356(b)(1)]
For each waste stream not controlled for benzene emissions in accordance with this subpart, the records shall include all test results, measurements, calculations, and other documentation used to determine the following information for the waste stream: waste stream identification, water content, whether or not the waste stream is a process wastewater stream, annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.

(b) [61.356(b)(2)]
For each waste stream exempt from 40 CFR 61.342(c)(1) [see section A.II.] in accordance with 40 CFR 61.342(c)(3) [see section A.II.], the records shall include:

(i) [61.356(b)(2)(i)]
All measurements, calculations, and other documentation used to determine that the continuous flow of process wastewater is less than 0.02 liters (0.005 gallons) per minute or the annual waste quantity of process wastewater is less than 10 Mg/yr (11 ton/yr) in accordance with 40 CFR 61.342(c)(3)(i) [see section A.II.], or

(ii) [61.356(b)(2)(ii)]
All measurements, calculations, and other documentation used to determine that the sum of the total annual benzene quantity in all exempt waste streams does not exceed 2.0 Mg/yr (2.2 ton/yr) in accordance with 40 CFR 61.342(c)(3)(ii) [see section A.II.].

(c) [61.356(b)(3)]

For each facility where process wastewater streams are controlled for benzene emissions in accordance with 40 CFR 61.342(d) , the records shall include for each treated process wastewater stream all measurements, calculations, and other documentation used to determine the annual benzene quantity in the process wastewater stream exiting the treatment process.

(d) [61.356(b)(4)]
For each facility where waste streams are controlled for benzene emissions in accordance with 40 CFR 61.342(e), the records shall include for each waste stream all measurements, including the locations of the measurements, calculations, and other documentation used to determine that the total benzene quantity does not exceed 6.0 Mg/yr (6.6 ton/yr).

(e) [61.356(b)(5)]
For each facility where the annual waste quantity for process unit turnaround waste is determined in accordance with 40 CFR 61.355(b)(5) [see section A.V.], the records shall include all test results, measurements, calculations, and other documentation used to determine the following information: identification of each process unit at the facility that undergoes turnarounds, the date of the most recent turnaround for each process unit, identification of each process unit turnaround waste, the water content of each process unit turnaround waste, the annual waste quantity determined in accordance with 40 CFR 61.355(b)(5) [see section A.V.], the range of benzene concentrations in the waste, the annual average flow-weighted benzene concentration of the waste, and the annual benzene quantity calculated in accordance with 40 CFR 61.355(a)(1)(iii) [see section A.V.].

(f) [61.356(b)(6)]
For each facility where wastewater streams are controlled for benzene emissions in accordance with 40 CFR 61.348(b)(2) [see section A.II.], the records shall include all measurements, calculations, and other documentation used to determine the annual benzene content of the waste streams and the total annual benzene quantity contained in all waste streams managed or treated in exempt waste management units.

iii. [61.356(c)]
The permittee transferring waste off-site to another facility for treatment in accordance with 40 CFR 61.342(f) [see section A.II] shall maintain documentation for each offsite waste shipment that includes the following information: Date waste is shipped offsite, quantity of waste shipped offsite, name and address of the facility receiving the waste, and a copy of the notice sent with the waste shipment.

iv. [61.356(d)]
A permittee using control equipment in accordance with 40 CFR 61.343 through 61.347 [see sections A.II] shall maintain engineering design documentation for all control equipment that is installed on the waste management unit. The

documentation shall be retained for the life of the control equipment. If a control device is used, then the permittee shall maintain the control device records required by 40 CFR 61.355(f) [See Section A.IV].

v. [61.356(e)]
A permittee using a treatment process or wastewater treatment system unit in accordance with 40 CFR 61.348 [see section A.II.] shall maintain the following records. The documentation shall be retained for the life of the unit.

(a) [61.356(e)(1)]
A statement signed and dated by the permittee certifying that the unit is designed to operate at the documented performance level when the waste stream entering the unit is at the highest waste stream flow rate and benzene content expected to occur.

(b) [61.356(e)(2)]
If engineering calculations are used to determine treatment process or wastewater treatment system unit performance, then the permittee shall maintain the complete design analysis for the unit. The design analysis shall include for example the following information: Design specifications, drawings, schematics, piping and instrumentation diagrams, and other documentation necessary to demonstrate the unit performance.

(c) [61.356(e)(3)]
If performance tests are used to determine treatment process or wastewater treatment system unit performance, then the permittee shall maintain all test information necessary to demonstrate the unit performance.

(i) [61.356(e)(3)(i)]
A description of the unit including the following information: type of treatment process; manufacturer name and model number; and for each waste stream entering and exiting the unit, the waste stream type (e.g., process wastewater, sludge, slurry, etc.), and the design flow rate and benzene content.

(ii) [61.356(e)(3)(ii)]
Documentation describing the test protocol and the means by which sampling variability and analytical variability were accounted for in the determination of the unit performance. The description of the test protocol shall include the following information: sampling locations, sampling method, sampling frequency, and analytical procedures used for sample analysis.

(iii) [61.356(e)(3)(iii)]
Records of unit operating conditions during each test run including all key process parameters.

(iv) [61.356(e)(3)(iv)]

All test results.

(d) [61.356(e)(4)]
If a control device is used, then the permittee shall maintain the control device records required by 40 CFR 61.356(f).

vi. [61.356(f)]
The permittee using a closed-vent system and control device in accordance with 40 CFR 61.349 [see section A.II.] shall maintain the following records. The documentation shall be retained for the life of the control device.

(a) [61.356(f)(1)]
A statement signed and dated by the permittee certifying that the closed-vent system and control device is designed to operate at the documented performance level when the waste management unit vented to the control device is or would be operating at the highest load or capacity expected to occur.

(b) [61.356(f)(2)]
If engineering calculations are used to determine control device performance in accordance with 40 CFR 61.349(c), then a design analysis for the control device that includes for example:

(i) [61.356(f)(2)(i)]
Specifications, drawings, schematics, and piping and instrumentation diagrams prepared by the permittee, or the control device manufacturer or vendor that describe the control device design based on acceptable engineering texts. The design analysis shall address the following vent stream characteristics and control device operating parameters:

(aa) [61.356(f)(2)(i)(A)]
For a thermal vapor incinerator, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average temperature in the combustion zone and the combustion zone residence time.

(bb) [61.356(f)(2)(i)(B)]
For a catalytic vapor incinerator, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average temperatures across the catalyst bed inlet and outlet.

(cc) [61.356(f)(2)(i)(C)]

For a boiler or process heater, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average flame zone temperatures, combustion zone residence time, and description of method and location where the vent stream is introduced into the flame zone.

(dd) [61.356(f)(2)(i)(D)]
For a flare, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also consider the requirements specified in 40 CFR 60.18.

(ee) [61.356(f)(2)(i)(E)]
For a condenser, the design analysis shall consider the vent stream composition, constituent concentration, flow rate, relative humidity, and temperature. The design analysis shall also establish the design outlet organic compound concentration level or the design outlet benzene concentration level, design average temperature of the condenser exhaust vent stream, and the design average temperatures of the coolant fluid at the condenser inlet and outlet.

(ff) [61.356(f)(2)(i)(F)]
For a carbon adsorption system that regenerates the carbon bed directly on-site in the control device such as a fixed-bed adsorber, the design analysis shall consider the vent stream composition, constituent concentration, flow rate, relative humidity, and temperature. The design analysis shall also establish the design exhaust vent stream organic compound concentration level or the design exhaust vent stream benzene concentration level, number and capacity of carbon beds, type and working capacity of activated carbon used for carbon beds, design total steam flow over the period of each complete carbon bed regeneration cycle, duration of the carbon bed steaming and cooling/drying cycles, design carbon bed temperature after regeneration, design carbon bed regeneration time, and design service life of carbon.

(gg) [61.356(f)(2)(i)(G)]
For a carbon adsorption system that does not regenerate the carbon bed directly on-site in the control device, such as a carbon canister, the design analysis shall consider the vent stream composition, constituent concentration, flow rate, relative humidity, and temperature. The design analysis shall also establish the design exhaust vent stream organic

compound concentration level or the design exhaust vent stream benzene concentration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule.

(hh) [61.356(f)(2)(i)(H)]
For a control device subject to the requirements of 40 CFR 61.349(a)(2)(iv) [see section A.II], the design analysis shall consider the vent stream composition, constituent concentration, and flow rate. The design analysis shall also include all of the information submitted under 40 CFR 61.349(a)(2)(iv).

(c) [61.356(f)(3)]
If performance tests are used to determine control device performance in accordance with 40 CFR 61.349(c) [see section A.II.]:

(i) [61.356(f)(3)(i)]
A description of how it is determined that the test is conducted when the waste management unit or treatment process is operating at the highest load or capacity level. This description shall include the estimated or design flow rate and organic content of each vent stream and definition of the acceptable operating ranges of key process and control parameters during the test program.

(ii) [61.356(f)(3)(ii)]
A description of the control device including the type of control device, control device manufacturer's name and model number, control device dimensions, capacity, and construction materials.

(iii) [61.356(f)(3)(iii)]
A detailed description of sampling and monitoring procedures, including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis.

(iv) [61.356(f)(3)(iv)]
All test results.

vii. [61.356(g)]
The permittee shall maintain a record for each visual inspection required by 40 CFR 61.343 through 61.347 [see section A.III.] that identifies a problem (such as a broken seal, gap or other problem) which could result in benzene emissions. The record shall include the date of the inspection, waste management unit and control equipment location where the problem is identified, a description of the problem, a

description of the corrective action taken, and the date the corrective action was completed.

viii. [61.356(h)]
A permittee shall maintain a record for each test of no detectable emissions required by 40 CFR 61.343 through 61.347 and 61.349 [see sections A.III.]. The record shall include the following information: date the test is performed, background level measured during test, and maximum concentration indicated by the instrument reading measured for each potential leak interface. If detectable emissions are measured at a leak interface, then the record shall also include the waste management unit, control equipment, and leak interface location where detectable emissions were measured, a description of the problem, a description of the corrective action taken, and the date the corrective action was completed.

ix. [61.356(i)]
For each treatment process and wastewater treatment system unit operated to comply with 40 CFR 61.348 [see section A.II.], the permittee shall maintain documentation that includes the following information regarding the unit operation:

(a) [61.356(i)(1)]
Dates of startup and shutdown of the unit.

(b) [61.356(i)(2)]
If measurements of waste stream benzene concentration are performed in accordance with 40 CFR 61.354(a)(1), the permittee shall maintain records that include date each test is performed and all test results.

(c) [61.356(i)(3)]
If a process parameter is continuously monitored in accordance with 40 CFR 61.354(a)(2), the permittee shall maintain records that include a description of the operating parameter (or parameters) to be monitored to ensure that the unit will be operated in conformance with these standards and the unit's design specifications, and an explanation of the criteria used for selection of that parameter (or parameters). This documentation shall be kept for the life of the unit.

(d) [61.356(i)(4)]
If measurements of waste stream benzene concentration are performed in accordance with 40 CFR 61.354(b) [see section A.III.], the permittee shall maintain records that include the date each test is performed and all test results.

(e) [61.356(i)(5)]
Periods when the unit is not operated as designed.

x. [61.356(j)]
For each control device, the permittee shall maintain documentation that includes the following information regarding the control device operation:

(a) [61.356(j)(1)]
Dates of startup and shutdown of the closed-vent system and control device.

(b) [61.356(j)(2)]
A description of the operating parameter (or parameters) to be monitored to ensure that the control device will be operated in conformance with these standards and the control device's design specifications and an explanation of the criteria used for selection of that parameter (or parameters). This documentation shall be kept for the life of the control device.

(c) [61.356(j)(3)]
Periods when the closed-vent system and control device are not operated as designed including all periods and the duration when:

(i) [61.356(j)(3)(i)]
Any valve car-seal or closure mechanism required under 40 CFR 61.349(a)(1)(ii) [see section A.II.] is broken or the by-pass line valve position has changed.

(ii) [61.356(j)(3)(ii)]
The flow monitoring devices required under 40 CFR 61.349(a)(1)(ii) [see section A.II.] indicate that vapors are not routed to the control device as required.

(d) [61.356(j)(4)]
If a thermal vapor incinerator is used, then the permittee shall maintain continuous records of the temperature of the gas stream in the combustion zone of the incinerator and records of all 3-hour periods of operation during which the average temperature of the gas stream in the combustion zone is more than 28°C below the design combustion zone temperature.

(e) [61.356(j)(5)]
If a catalytic vapor incinerator is used, then the permittee shall maintain continuous records of the temperature of the gas stream both upstream and downstream of the catalyst bed of the incinerator, records of all 3-hour periods of operation during which the average temperature measured before the catalyst bed is more than 28°C below the design gas stream temperature, and records of all 3-hour periods of operation during which the average temperature difference across the catalyst bed is less than 80 percent of the design temperature difference.

(f) [61.356(j)(6)]
If a boiler or process heater is used, then the permittee shall maintain records of each occurrence when there is a change in the location at which the vent stream is introduced into the flame zone as required by 40 CFR 61.349(a)(2)(i)(C) [see section A.II]. For a boiler or process heater having a design heat input capacity less than 44 MW (150 x 10^6 Btu), the permittee shall maintain continuous records of the temperature of the gas stream in the

combustion zone of the boiler or process heater and records of all 3-hour periods of operation during which the average temperature of the gas stream in the combustion zone is more than 28°C below the design combustion zone temperature. For a boiler or process heater having a design heat input capacity greater than or equal to 44 MW (150 x 10^6 Btu), the permittee shall maintain continuous records of the parameter(s) monitored in accordance with the requirements of 40 CFR 61.354(c)(5) [see section A.III].

(g) [61.356(j)(7)]
If a flare is used, then the permittee shall maintain continuous records of the flare pilot flame monitoring and records of all periods during which the pilot flame is absent.

(h) [61.356(j)(8)]
If a condenser is used, then the permittee shall maintain records from the monitoring device of the parameters selected to be monitored in accordance with 40 CFR 61.354(c)(6). If concentration of organics or concentration of benzene in the control device outlet gas stream is monitored, then the permittee shall record all 3-hour periods of operation during which the concentration of organics or the concentration of benzene in the exhaust stream is more than 20 percent greater than the design value. If the temperature of the condenser exhaust stream and coolant fluid is monitored, then the permittee shall record all 3-hour periods of operation during which the temperature of the condenser exhaust vent stream is more than 6°C above the design average exhaust vent stream temperature, or the temperature of the coolant fluid exiting the condenser is more than 6°C above the design average coolant fluid temperature at the condenser outlet.

(i) [61.356(j)(9)]
If a carbon adsorber is used, then the permittee shall maintain records from the monitoring device of the concentration of organics or the concentration of benzene in the control device outlet gas stream. If the concentration of organics or the concentration of benzene in the control device outlet gas stream is monitored, then the permittee shall record all 3-hour periods of operation during which the concentration of organics or the concentration of benzene in the exhaust stream is more than 20 percent greater than the design value. If the carbon bed regeneration interval is monitored, then the permittee shall record each occurrence when the vent stream continues to flow through the control device beyond the predetermined carbon bed regeneration time.

(j) [61.356(j)(10)]
If a carbon adsorber that is not regenerated directly on site in the control device is used, then the permittee shall maintain records of dates and times when the control device is monitored, when breakthrough is measured, and shall record the date and time then the existing carbon in the control device is replaced with fresh carbon.

(k) [61.356(j)(11)]
If an alternative operational or process parameter is monitored for a control device, as allowed in 40 CFR 61.354(e) , then the permittee shall maintain records of the continuously monitored parameter, including periods when the device is not operated as designed.

(l) [61.356(j)(12)]
If a control device subject to the requirements of 40 CFR 61.349(a)(2)(iv) [see section A.II] is used, then the permittee shall maintain records of the parameters that are monitored and each occurrence when the parameters monitored are outside the range of values specified in 40 CFR 61.349(a)(2)(iv)(C) [see section A.II], or other records as specified by the Administrator of U.S. EPA.

xi. [61.356(k)]
The permittee who elects to install and operate the control equipment in 40 CFR 61.351 [see section A.II.] shall comply with the record keeping requirements in 40 CFR 60.115b.

xii. [61.356(l)]
The permittee who elects to install and operate the control equipment in 40 CFR 61.352 [see section A.II] shall maintain records of the following:

(a) [61.356(l)(1)]
The date, location, and corrective action for each visual inspection required by 40 CFR 60.693-2(a)(5), during which a broken seal, gap, or other problem is identified that could result in benzene emissions.

(b) [61.356(l)(2)]
Results of the seal gap measurements required by 40 CFR 60.693-2(a).

xiii. [61.356(m)]
If a system is used for emission control that is maintained at a pressure less than atmospheric pressure with openings to provide dilution air, then the permittee shall maintain records of the monitoring device and records of all periods during which the pressure in the unit is operated at a pressure that is equal to or greater than atmospheric pressure.

xiv. [61.356(n)
The permittee using a total enclosure to comply with control requirements for tanks in 40 CFR 61.343 or the control requirements for containers in 40 CFR 61.345 must keep the records required in paragraphs (n)(1) and (2) of 40 CFR 61.356. The permittee may use records as required in 40 CFR 264.1089(b)(2)(iv) or 40 CFR 265.1090(b)(2)(iv) for a tank or as required in 40 CFR 264.1089(d)(1) or 40 CFR 265.1090(d)(1) for a container to meet the record keeping requirement in 40 CFR 61.356(n)(1). The permittee must make the records of each verification of a total enclosure available for inspection upon request.

(a) [61.356(n)(1)]
Records of the most recent set of calculations and measurements performed to verify that the enclosure meets the criteria of a permanent total enclosure as specified in "Procedure T - Criteria for and Verification of a Permanent or Temporary Total Enclosure" in 40 CFR 52.741, appendix B;

(b) [61.356(n)(2)]
Records required for a closed-vent system and control device according to the requirements in paragraphs (d)(f), and (j) of 40 CFR 61.356.

3. Monitoring Requirement for OAC rule 3745-21-09(M)(2)
Except for any wastewater separator which is used solely for once-through, noncontact cooling water or for intermittent tank farm drainage resulting from accumulated precipitation, the permittee shall check all covers and forebay and separator sections by visual inspections quarterly to ensure that they are equipped with lids and seals that are kept in a closed position at all times except when in actual use.

4. 40 CFR Part 60, Subpart QQQ

a. [60.692-2] STANDARDS: Individual Drain Systems

i. [60.692-2(a)(2)]
Each drain in active service shall be checked by visual or physical inspection initially and monthly thereafter for indications of low water levels or other conditions that would reduce the effectiveness of the water seal controls.

ii. [60.692-2(a)(3)]
Except as provided in 40 CFR 60.692-3(a)(4), each drain out of active service shall be checked by visual or physical inspection initially and weekly thereafter for indications of low water levels or other problems that could result in VOC emissions.

iii. [60.692-2(a)(4)]
As an alternative to the requirements in 40 CFR 60.692-3(a)(3), if the permittee elects to install a tightly sealed cap or plug over a drain that is out of service, inspections shall be conducted initially and semiannually to ensure caps or plugs are in place and properly installed.

iv. [60.692-2(a)(5)]
Whenever low water levels or missing or improperly installed caps or plugs are identified, water shall be added or first efforts at repair shall be made as soon as practicable, but not later than 24 hours after detection, except as provided in 40 CFR 60.692-6.

v. [60.692-2(b)(3)]
Junction boxes shall be visually inspected initially and semiannually thereafter to ensure that the cover is in place and to ensure that the cover has a tight seal around the edge.

vi. [60.692-2(b)(4)]
If a broken seal or gap is identified, first effort at repair shall be made as soon as practicable, but not later than 15 calendar days after the broken seal or gap is identified, except as provided in 40 CFR 60.692-6.

vii. [60.692-2(c)(2)]
The portion of each unburied sewer line shall be visually inspected initially and semiannually thereafter for indication of cracks, gaps, or other problems that could result in VOC emissions.

viii. [60.692-2(c)(3)]
Whenever cracks, gaps, or other problems are detected, repairs shall be made as soon as practicable, but not later than 15 calendar days after identification, except as provided in 40 CFR 60.692-6.

b. [60.692] Standards: Oil-water separators

i. [60.692-3(a)(4)]
Roof seals, access doors, and other openings shall be checked by visual inspection initially and semiannually thereafter to ensure that no cracks or gaps occur between the roof and wall and that access doors and other openings are closed and gasketed properly.

ii. [60.692-3(a)(5)]
When a broken seal or gasket or other problem is identified, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after it is identified, except as provided in 40 CFR 60.692-6.

c. [60.692-6] Standards: Delay of repair

i. [60.692-6(a)]
Delay of repair of facilities that are subject to the provisions of this subpart will be allowed if the repair is technically impossible without a complete or partial refinery or process unit shutdown.

ii. [60.692-6(b)]
Repair of such equipment shall occur before the end of the next refinery or process unit shutdown.

d. [60.693-1] Alternative standards for individual drain systems

i. [60.693-1(e)(2)]
The portion of each unburied sewer line shall be visually inspected initially and semiannually thereafter for indication of cracks, gaps, or other problems that could result in VOC emissions.

ii. [60.693-1(e)(3)]

Whenever cracks, gaps, or other problems are detected, repairs shall be made as soon as practicable, but not later than 15 calendar days after identification, except as provided in 40 CFR 60.692-6.

e. [60.693-2] Alternative standards for oil-water separators

i. [60.693-2(a)(1)(iii)]
The maximum gap width and total gap area shall be determined by the methods and procedures specified in 40 CFR 60.696(d) [see section A.V].

(a) [60.693-2(a)(1)(iii)(A)]
Measurement of primary seal gaps shall be performed within 60 calendar days after initial installation of the floating roof and introduction of refinery wastewater and once every 5 years thereafter.

(bb) [60.693-2(a)(1)(iii)(B)]
Measurement of secondary seal gaps shall be performed within 60 calendar days of initial introduction of refinery wastewater and once every year thereafter.

ii. [60.693-2(a)(1)(iv)]
The permittee shall make necessary repairs within 30 calendar days of identification of seals not meeting the requirements listed in paragraphs (a)(1) (i) and (ii) of 40 CFR 60.693-2.

iii. [60.693-2(a)(5)]
Access doors and other openings shall be visually inspected initially and semiannually thereafter to ensure that there is a tight fit around the edges and to identify other problems that could result in VOC emissions.

iv. [60.693-2(a)(5)(ii)]
When a broken seal or gasket on an access door or other opening is identified, it shall be repaired as soon as practicable, but not later than 30 calendar days after it is identified, except as provided in 40 CFR 60.692-6.

f. [60.695] Monitoring of operations

i. [60.695(a)]
The permittee shall install, calibrate, maintain, and operate according to manufacturer's specifications the following equipment, unless alternative monitoring procedures or requirements are approved for that facility by the Administrator.

(a) [60.695(a)(1)]
Where a thermal incinerator is used for VOC emission reduction, a temperature monitoring device equipped with a continuous recorder shall be used to measure the temperature of the gas stream in the combustion zone of the incinerator. The temperature monitoring device shall have an accuracy of

±1 percent of the temperature being measured, expressed in °C, or ±0.5 °C (0.9 °F), whichever is greater.

(b) [60.695(a)(2)]
Where a catalytic incinerator is used for VOC emission reduction, temperature monitoring devices, each equipped with a continuous recorder shall be used to measure the temperature in the gas stream immediately before and after the catalyst bed of the incinerator. The temperature monitoring devices shall have an accuracy of ±1 percent of the temperature being measured, expressed in °C, or ±0.5 °C (0.9 °F), whichever is greater.

(c) [60.695(a)(3)]
Where a carbon adsorber is used for VOC emissions reduction, a monitoring device that continuously indicates and records the VOC concentration level or reading of organics in the exhaust gases of the control device outlet gas stream or inlet and outlet gas stream shall be used.

(i) [60.695(a)(3)(i)]
For a carbon adsorption system that regenerates the carbon bed directly onsite, a monitoring device that continuously indicates and records the volatile organic compound concentration level or reading of organics in the exhaust gases of the control device outlet gas stream or inlet and outlet gas stream shall be used.

(ii) [60.695(a)(3)(ii)]
For a carbon adsorption system that does not regenerate the carbon bed directly onsite in the control device (e.g., a carbon canister), the concentration level of the organic compounds in the exhaust vent stream from the carbon adsorption system shall be monitored on a regular schedule, and the existing carbon shall be replaced with fresh carbon immediately when carbon breakthrough is indicated. The device shall be monitored on a daily basis or at intervals no greater than 20 percent of the design carbon replacement interval, whichever is greater. As an alternative to conducting this monitoring, the permittee may replace the carbon in the carbon adsorption system with fresh carbon at a regular predetermined time interval that is less than the carbon replacement interval that is determined by the maximum design flow rate and organic concentration in the gas stream vented to the carbon adsorption system.

(d) [60.695(a)(4)]
Where a flare is used for VOC emission reduction, the permittee shall comply with the monitoring requirements of 40 CFR 60.18(f)(2).

ii. [60.695(b)]
Where a VOC recovery device other than a carbon adsorber is used to meet the requirements specified in 40 CFR 60.692-5(a), the permittee shall provide to the Administrator information describing the operation of the control device and the

process parameter(s) that would indicate proper operation and maintenance of the device. The Administrator may request further information and will specify appropriate monitoring procedures or requirements.

iii. [60.695(c)]
An alternative operational or process parameter may be monitored if it can be demonstrated that another parameter will ensure that the control device is operated in conformance with these standards and the control device's design specifications.

g. [60.697] Record keeping requirements 40 CFR Part 60, Subpart QQQ

i. [60.697(a)]
Each permittee of a facility subject to the provisions of 40 CFR Part 60, Subpart QQQ shall comply with the record keeping requirements of 40 CFR 60.697. All records shall be retained for a period of 2 years after being recorded unless otherwise noted.

ii. [60.697(b)(1)]
For individual drain systems subject to 40 CFR 60.692-2 [see section A.II], the location, date, and corrective action shall be recorded for each drain when the water seal is dry or otherwise breached, when a drain cap or plug is missing or improperly installed, or other problem is identified that could result in VOC emissions, as determined during the initial and periodic visual or physical inspection.

iii. [60.697(b)(2)]
For junction boxes subject to 40 CFR 60.692-2 [see section A.II], the location, date, and corrective action shall be recorded for inspections required by 40 CFR 60.692-2(b) [see section A.III] when a broken seal, gap, or other problem is identified that could result in VOC emissions.

iv. [60.697(b)(3)]
For sewer lines subject to 40 CFR 60.692-2 and 60.693-1(e) [see section A.II], the location, date, and corrective action shall be recorded for inspections required by 40 CFR 60.692-2(c) and 60.693-1(e) [see section A.III] when a problem is identified that could result in VOC emissions.

v. [60.697(c)]
For oil-water separators subject to 40 CFR 60.692-3 [see section A.II], the location, date, and corrective action shall be recorded for inspections required by 40 CFR 60.692-3(a) [see section A.III] when a problem is identified that could result in VOC emissions.

vi. [60.697(d)]
For closed vent systems subject to 40 CFR 60.692-5 [see section A.II] and completely closed drain systems subject to 40 CFR 60.693-1[see section A.II], the location, date, and corrective action shall be recorded for inspections required by 40 CFR 60.692-5(e) [see section A.III] during which detectable emissions are measured or a problem is identified that could result in VOC emissions.

vii. [60.697(e)(1)]
If an emission point cannot be repaired or corrected without a process unit shutdown, the expected date of a successful repair shall be recorded.

(a) [60.697(e)(2)]
The reason for the delay as specified in 40 CFR 60.692-6 [see section A.III] shall be recorded if an emission point or equipment problem is not repaired or corrected in the specified amount of time.

(b) [697(e)(3)]
The signature of the permittee (or designee) whose decision it was that repair could not be effected without refinery or process shutdown shall be recorded.

(c) [60.697(e)(4)]
The date of successful repair or corrective action shall be recorded.

viii. [60.697(f)]
A copy of the design specifications for all equipment used to comply with the provisions of this subpart shall be kept for the life of the source in a readily accessible location.

ix. [60.697(f)(2)]
The following information pertaining to the design specifications shall be kept.

(a) [60.697(f)(2)(i)]
Detailed schematics, and piping and instrumentation diagrams.

(b) [60.697(f)(2)(ii)]
The dates and descriptions of any changes in the design specifications.

(c) [60.697(f)(3)]
The following information pertaining to the operation and maintenance of closed drain systems and closed vent systems shall be kept in a readily accessible location.

(i) [60.697(f)(3)(i)]
Documentation demonstrating that the control device will achieve the required control efficiency during maximum loading conditions shall be kept for the life of the facility. This documentation is to include a general description of the gas streams that enter the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816°C (1,500°F) is used to meet the 95-percent requirement, documentation that those conditions exist is sufficient to meet the requirements of this paragraph.

(ii) [60.697(f)(3)(ii)]
A description of the operating parameter (or parameters) to be monitored to ensure that the control device will be operated in conformance with these standards and the control device's design specifications and an explanation of the criteria used for selection of that parameter (or parameters) shall be kept for the life of the facility.

(iii) [60.697(f)(3)(iii)]
Periods when the closed vent systems and control devices required in 40 CFR 60.692 [see section A.II] are not operated as designed, including periods when a flare pilot does not have a flame shall be recorded and kept for 2 years after the information is recorded.

(iv) [60.697(f)(3)(iv)]
Dates of startup and shutdown of the closed vent system and control devices required in 40 CFR 60.692 shall be recorded and kept for 2 years after the information is recorded.

(v) [60.697(f)(3)(v)]
The dates of each measurement of detectable emissions required in 40 CFR 60.692, 60.693, or 60.692-5 shall be recorded and kept for 2 years after the information is recorded.

(vi) [60.697(f)(3)(vi)]
The background level measured during each detectable emissions measurement shall be recorded and kept for 2 years after the information is recorded.

(vii) [60.697(f)(3)(vii)]
The maximum instrument reading measured during each detectable emission measurement shall be recorded and kept for 2 years after the information is recorded.

(viii) [60.697(f)(3)(viii)]
Each permittee of an affected facility that uses a thermal incinerator shall maintain continuous records of the temperature of the gas stream in the combustion zone of the incinerator and records of all 3-hour periods of operation during which the average temperature of the gas stream in the combustion zone is more than 28°C below the design combustion zone temperature, and shall keep such records for 2 years after the information is recorded.

(ix) [60.697(f)(3)(ix)]
Each permittee of an affected facility that uses a catalytic incinerator shall maintain continuous records of the temperature of the gas stream both upstream and downstream of the catalyst bed of the incinerator, records of all 3-hour periods of operation during which

the average temperature measured before the catalyst bed is more than 28°C below the design gas stream temperature, and records of all 3-hour periods during which the average temperature difference across the catalyst bed is less than 80 percent of the design temperature difference, and shall keep such records for 2 years after the information is recorded.

(x) [60.697(f)(3)(x)]
Each permittee of an affected facility that uses a carbon adsorber shall maintain continuous records of the VOC concentration level or reading of organics of the control device outlet gas stream or inlet and outlet gas stream and records of all 3-hour periods of operation during which the average VOC concentration level or reading of organics in the exhaust gases, or inlet and outlet gas stream, is more than 20 percent greater than the design exhaust gas concentration level, and shall keep such records for 2 years after the information is recorded.

x. [60.697(g)]
If the permittee elects to install a tightly sealed cap or plug over a drain that is out of active service, the permittee shall keep for the life of a facility in a readily accessible location, plans or specifications which indicate the location of such drains.

xi. [60.697(h)]
For stormwater sewer systems subject to the exclusion in 40 CFR 60.692-1(d)(1) [see section A.II], the permittee shall keep for the life of the facility in a readily accessible location, plans or specifications which demonstrate that no wastewater from any process units or equipment is directly discharged to the stormwater sewer system.

xii. [60.697(i)]
For ancillary equipment subject to the exclusion in 40 CFR 60.692-1(d)(2) [see section A.II], the permittee shall keep for the life of a facility in a readily accessible location, plans or specifications which demonstrate that the ancillary equipment does not come in contact with or store oily wastewater.

xiii. [60.697(j)]
For non-contact cooling water systems subject to the exclusion in 40 CFR 60.692-1(d)(3) [see section A.II], the permittee shall keep for the life of the facility in a readily accessible location, plans or specifications which demonstrate that the cooling water does not contact hydrocarbons or oily wastewater and is not recirculated through a cooling tower.

xiv. [60.697(k)]
For oil-water separators subject to 40 CFR 60.693-2 see section A.II], the location, date, and corrective action shall be recorded for inspections required by 40 CFR 60.693-2(a)(1)(iii)(A) and (B) [see section A.III], and shall be maintained for the time period specified in paragraphs (k)(1) and (2) 40 CFR 60.697.

(a) [60.697(k)(1)]
For inspections required by 40 CFR 60.693-2(a)(1)(iii)(A) [see section A.III], ten years after the information is recorded.

(b) [60.697(k)(2)]
For inspections required by 40 CFR 60.693-2(a)(1)(iii)(B) [see section A.III], two years after the information is recorded.

5. General Record Keeping Requirements
The permittee shall maintain files of all information (including all reports and notifications) required by this permit recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

IV. Reporting Requirements

1. 40 CFR Part 63, Subpart CC

a. [63.654(a)]
The permittee subject to the wastewater provisions in 40 CFR 63.647 [see section A.II.] shall comply with the record keeping and reporting provisions in 40 CFR 61.356 and 61.357 of 40 CFR Part 61, Subpart FF [see sections A.III. and A.IV.] unless the permittee is complying with the wastewater provisions specified in paragraph (o)(2)(ii) of 40 CFR 63.640 [see section A.I.2.]. There are no additional reporting and record keeping requirements for wastewater under 40 CFR Part 63, Subpart CC unless a wastewater stream is included in an emissions average.

b. Miscellaneous Process Vents
See the applicable sections in Part II for miscellaneous process vents in A.IV., referencing 40 CFR Part 63, Subpart CC.

2. [61.357] REPORTING REQUIREMENTS - 40 CFR Part 61, Subpart FF - National Emission Standard for Benzene Waste Operations

a. [61.357(a)]
The permittee shall submit to the Administrator by the initial startup for a new source, a report that summarizes the regulatory status of each waste stream subject to 40 CFR 61.342 [see section A.II.] and is determined by the procedures specified in 40 CFR 61.355(c) [see section A.V.] to contain benzene. The report shall include the following information:

i. [61.357(a)(1)]
Total annual benzene quantity from facility waste determined in accordance with 40 CFR 61.355(a) [see section A.V.].

ii. [61.357(a)(2)]

A table identifying each waste stream and whether or not the waste stream will be controlled for benzene emissions in accordance with the requirements 40 CFR Part 61, Subpart FF.

iii. [61.357(a)(3)]
For each waste stream identified as not being controlled for benzene emissions in accordance with the requirements of 40 CFR Part 61, Subpart FF, the following information shall be added to the table:

(a) [61.357(a)(3)(i)]
Whether or not the water content of the waste stream is greater than 10 percent;

(b) [61.357(a)(3)(ii)]
Whether or not the waste stream is a process wastewater stream, product tank drawdown, or landfill leachate;

(c) [61.357(a)(3)(iii)]
Annual waste quantity for the waste stream;

(d) [61.357(a)(3)(iv)]
Range of benzene concentrations for the waste stream;

(e) [61.357(a)(3)(v)]
Annual average flow-weighted benzene concentration for the waste stream; and

(f) [61.357(a)(3)(vi)]
Annual benzene quantity for the waste stream.

iv. [61.357(a)(4)]
The information required in paragraphs 40 CFR 61.357(a)(1), (2), and (3) should represent the waste stream characteristics based on current configuration and operating conditions. The permittee only needs to list in the report those waste streams that contact materials containing benzene. The report does not need to include a description of the controls to be installed to comply with the standard or other information required in 40 CFR 61.10(a) of subpart A.

b. [61.357(b)]
If the total annual benzene quantity from facility waste is less than 1 Mg/yr (1.1 ton/yr), then the permittee shall submit a report to the Administrator a report that updates the information listed in paragraphs (a)(1) through (a)(3) of 40 CFR 61.357 whenever there is a change in the process generating the waste stream that could cause the total annual benzene quantity from facility waste to increase to 1 Mg/yr (1.1 ton/yr) or more.

c. [61.357(c)]
If the total annual benzene quantity from facility waste is less than 10 Mg/yr (11 ton/yr) but is equal to or greater than 1 Mg/yr (1.1 ton/yr), then the permittee shall submit to the Administrator a report that updates the information listed in paragraphs (a)(1) through (a)(3) of 40 CFR 61.357. The report shall be submitted annually and whenever there is a change in the process generating the waste stream that could cause the total annual benzene quantity from facility waste to increase to 10 Mg/yr (11 ton/yr) or more. If the information in the annual report required by paragraphs (a)(1) through (a)(3) of 40 CFR 61.357 is not changed in the following year, the permittee may submit a statement to that effect.

d. [61.357(d)]
If the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr (11 tons/yr), then the permittee shall submit to the Administrator the following reports:

i. [61.357(d)(1)]
By the date of initial startup for a new source, a certification that the equipment necessary to comply with these standards has been installed and that the required initial inspections or tests have been carried out in accordance with this subpart.

ii. [61.357(d)(2)]
By December 30 of each year, the permittee shall submit annually to the Administrator, a report that updates the information listed in 40 CFR 61.357(a)(1) through (a)(3). If the information in the annual report required by 40 CFR 61.357(a)(1) through (a)(3) is not changed in the following year, the permittee may submit a statement to that effect.

iii. [61.357(d)(3)]
If the permittee elects to comply with the requirements of 40 CFR 61.342(c)(3)(ii) [see section A.II.], then the report required by 40 CFR 61.342(d)(2) [see section A.IV] shall include a table identifying each waste stream chosen for exemption and the total annual benzene quantity in these exempted streams.

iv. [61.357(d)(4)]
If the permittee elects to comply with the alternative requirements of 40 CFR 61.342(d), then the permittee shall include in the report required by paragraph (d)(2) of 40 CFR 61.357 a table presenting the following information for each process wastewater stream:

(a) [61.357(d)(4)(i)]
Whether or not the process wastewater stream is being controlled for benzene emissions in accordance with the requirements of 40 CFR Part 61, Subpart FF;

(b) [61.357(d)(4)(ii)]
For each process wastewater stream identified as not being controlled for benzene emissions in accordance with the requirements of 40 CFR Part 61, Subpart FF, the table shall report the following information for the process wastewater stream as determined at the point of waste generation: annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity;

(c) 40 CFR 61.357(d)(4)(iii)
For each process wastewater stream identified as being controlled for benzene emissions in accordance with the requirements of 40 CFR Part 61, Subpart FF, the table shall report the following information for the process wastewater stream as determined at the exit to the treatment process: Annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.

v. [61.357(d)(5)]
If the permittee elects to comply with the alternative requirements of 40 CFR 61.342(e), then the report required by paragraph (d)(2) of 40 CFR 61.357 shall include a table presenting the following information for each waste stream:

(a) [61.357(d)(5)(i)]
For each waste stream identified as not being controlled for benzene emissions in accordance with the requirements of 40 CFR Part 61, Subpart FF; the table shall report the following information for the waste stream as determined at the point of waste generation: annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity;

(b) 40 CFR 61.357(d)(5)(ii)
For each waste stream identified as being controlled for benzene emissions in accordance with the requirements of 40 CFR Part 61, Subpart FF; the table shall report the following information for the waste stream as determined at the applicable location described in 40 CFR 61.355(k)(2): Annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.

vi. [61.357(d)(6)]
The permittee shall submit quarterly by March 30, June 30, September 30, and December 30 to the Administrator a certification that all of the required inspections have been carried out in accordance with the requirements of 40 CFR Part 61, Subpart FF.

vii. [61.357(d)(7)]
The permittee shall submit quarterly by March 30, June 30, September 30, and December 30 to the Administrator that includes:

(a) [61.357(d)(7)(i)]
If a treatment process or wastewater treatment system unit is monitored in accordance with 40 CFR 61.354(a)(1) [see section A.III], then each period of operation during which the concentration of benzene in the monitored waste stream exiting the unit is equal to or greater than 10 ppmw.

(b) [61.357(d)(7)(ii)]
If a treatment process or wastewater treatment system unit is monitored in accordance with 40 CFR 61.354(a)(2) [see section A.III], then each 3-hour period of operation during which the average value of the monitored parameter is outside the range of acceptable values or during which the unit is not operating as designed.

(c) [61.357(d)(7)(iii)]
If a treatment process or wastewater treatment system unit is monitored in accordance with 40 CFR 61.354(b) [see section A.III.], then each period of operation during which the flow-weighted annual average concentration of

benzene in the monitored waste stream entering the unit is equal to or greater than 10 ppmw and/or the total annual benzene quantity is equal to or greater than 1.0 mg/yr (1.1 ton/yr).

(d) [61.357(d)(7)(iv)]
For a control device monitored in accordance with 40 CFR 61.354(c) [see section A.III], each period of operation monitored during which any of the following conditions occur, as applicable to the control device:

(i) [61.357(d)(7)(iv)(A)]
Each 3-hour period of operation during which the average temperature of the gas stream in the combustion zone of a thermal vapor incinerator, as measured by the temperature monitoring device, is more than 28°C below the design combustion zone temperature.

(ii) [61.357(d)(7)(iv)(B)]
Each 3-hour period of operation during which the average temperature of the gas stream immediately before the catalyst bed of a catalytic vapor incinerator, as measured by the temperature monitoring device, is more than 28°C below the design gas stream temperature, and any 3-hour period during which the average temperature difference across the catalyst bed (i.e., the difference between the temperatures of the gas stream immediately before and after the catalyst bed), as measured by the temperature monitoring device, is less than 80 percent of the design temperature difference.

(iii) [61.357(d)(7)(iv)(C)]
Each 3-hour period of operation during which the average temperature of the gas stream in the combustion zone of a boiler or process heater having a design heat input capacity less than 44 MW (150×10^6 Btu), as measured by the temperature monitoring device, is more than 28°C below the design combustion zone temperature.

(iv) [61.357(d)(7)(iv)(D)]
Each 3-hour period of operation during which the average concentration of organics or the average concentration of benzene in the exhaust gases from a carbon adsorber, condenser, or other vapor recovery system is more than 20 percent greater than the design concentration level of organics or benzene in the exhaust gas.

(v) [61.357(d)(7)(iv)(E)]
Each 3-hour period of operation during which the temperature of the condenser exhaust vent stream is more than 6°C above the design average exhaust vent stream temperature, or the temperature of the coolant fluid exiting the condenser is more than 6°C above the design average coolant fluid temperature at the condenser outlet.

(vi) [61.357(d)(7)(iv)(F)]
Each period in which the pilot flame of a flare is absent.

(vii) [61.357(d)(7)(iv)(G)]
Each occurrence when there is a change in the location at which the vent stream is introduced into the flame zone of a boiler or process heater as required by 40 CFR 61.349(a)(2)(i)(C) [see section A.II].

(viii) [61.357(d)(7)(iv)(H)]
Each occurrence when the carbon in a carbon adsorber system that is regenerated directly on site in the control device is not regenerated at the predetermined carbon bed regeneration time.

(ix) [61.357(d)(7)(iv)(I)]
Each occurrence when the carbon in a carbon adsorber system that is not regenerated directly on site in the control device is not replaced at the predetermined interval specified in 40 CFR 61.354(c) [see section A.III].

(x) [61.357(d)(7)(iv)(J)]
Each 3-hour period of operation during which the parameters monitored are outside the range of values specified in 40 CFR 61.349(a)(2)(iv)(C) [see section A.II], or any other periods specified by the Administrator of U.S. EPA for a control device subject to the requirements of 40 CFR 61.349(a)(2)(iv).

(e) [61.357(d)(7)(v)]
For a cover and closed-vent system monitored in accordance with 40 CFR 61.354(g), the permittee shall submit a report quarterly by March 30, June 30, September 30, and December 30 quarterly to the Administrator that identifies any period in which the pressure in the waste management unit is equal to or greater than atmospheric pressure.

viii. [61.357(d)(8)]
By December 30 of each year, the permittee shall submit annually to the Administrator a report that summarizes all inspections required by 40 CFR 61.342 through 61.354 [see section A.III.] during which detectable emissions are measured or a problem (such as a broken seal, gap or other problem) that could result in benzene emissions is identified, including information about the repairs or corrective action taken.

e. [61.357(e)]
The permittee electing to comply with the provisions of 40 CFR 61.351 [see section A.II.] or 40 CFR 61.352 shall notify the Administrator of the alternative standard selected in the report required under 40 CFR 61.07 or 61.10.

f. [61.357(f)]

The permittee who elects to install and operate the control equipment in 61.351 [see section A.II.] shall comply with the reporting requirements in 40 CFR 60.115b.

g. [61.367(g)]
If the permittee elects to install and operate the control equipment in 40 CFR 61.352 [see Section A.II], then the permittee shall submit initial and quarterly reports that identify all seal gap measurements, as required in 40 CFR 60.693-2(a) [see section A.III], that are outside the prescribed limits.

3. Deviation Reporting Requirements for OAC rule 3745-21-09(M)(2)

Except for any wastewater separator which is used solely for once-through, noncontact cooling water or for intermittent tank farm drainage resulting from accumulated precipitation, the permittee shall submit deviation (excursion reports) that identify all occurrences where covers, forebay and other separator sections were not equipped with lids, seals, or kept in a closed position except when in actual use., the permittee shall check all covers and forebay and separator sections by visual inspections quarterly to ensure that they are equipped with lids and seals that are kept in a closed position at all times except when in actual use. These reports shall be submitted quarterly to the Canton City Health Department, Air Pollution Control Division by January 30, April 30, July 30 and October 30 of each year and shall cover the previous calendar quarter. If no deviations occurred during the quarter the permittee shall submit a statement that no deviations occurred during the calendar quarter.

4. [60.698] Reporting requirements - 40 CFR Part 60, Subpart QQQ

a. [60.698(a)]
The permittee electing to comply with the provisions of 40 CFR 60.693 shall notify the Administrator of the alternative standard selected in the report required in 40 CFR 60.7.

b. [60.698(b)]
The permittee shall submit to the Administrator within 60 days after initial startup a certification that the equipment necessary to comply with these standards has been installed and that the required initial inspections or tests of process drains, sewer lines, junction boxes, oil-water separators, and closed vent systems and control devices have been carried out in accordance with these standards. Thereafter, the permittee shall submit to the Administrator semiannually a certification that all of the required inspections have been carried out in accordance with these standards.

c. [60.698(b)(2)]
The permittee of an affected facility that uses a flare shall submit to the Administrator within 60 days after initial startup, as required under 40 CFR 60.8(a), a report of the results of the performance test required in 40 CFR 60.696(c) [see section A.V].

d. [60.698(c)]
A report that summarizes all inspections when a water seal was dry or otherwise breached, when a drain cap or plug was missing or improperly installed, or when cracks, gaps, or other problems were identified that could result in VOC emissions, including information about

the repairs or corrective action taken, shall be submitted initially and semiannually thereafter to the Administrator.

e. [60.698(d)]
As applicable, a report shall be submitted semiannually to the Administrator that indicates:

i. [60.698(d)(1)]
Each 3-hour period of operation during which the average temperature of the gas stream in the combustion zone of a thermal incinerator, as measured by the temperature monitoring device, is more than 28°C below the design combustion zone temperature,

ii. [60.698(d)(2)]
Each 3-hour period of operation during which the average temperature of the gas stream immediately before the catalyst bed of a catalytic incinerator, as measured by the temperature monitoring device, is more than 28°C below the design gas stream temperature, and any 3-hour period during which the average temperature difference across the catalyst bed (i.e., the difference between the temperatures of the gas stream immediately before and after the catalyst bed), as measured by the temperature monitoring device, is less than 80 percent of the design temperature difference, or,

iii. [60.698(d)(3)]
Each 3-hour period of operation during which the average VOC concentration level or reading of organics in the exhaust gases from a carbon adsorber is more than 20 percent greater than the design exhaust gas concentration level or reading.

f. [60.698(e)]
If compliance with the provisions of this subpart is delayed pursuant to 40 CFR 60.692-7 [see section A.II], the notification required under 40 CFR 60.7(a)(4) shall include the estimated date of the next scheduled refinery or process unit shutdown after the date of notification and the reason why compliance with the standards is technically impossible without a refinery or process unit shutdown.

5. General Reporting Requirements

a. All requests, reports, applications, submittals, and other communications pursuant to this permit shall be submitted to: Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

b. All requests, reports, applications, submittals, and other communications to the Administrator pursuant to this permit shall be submitted to: Canton City Health Department, Air Pollution Control Division; and, Director Ohio EPA c/o Bob Hodanbosi, Ohio EPA, Lazarus Government Center, P.O. Box 1049, Columbus, OH 43216-1049.

c. If any State requires a submittal that contains all the information required in an application, notification, request, report, statement, or other communication required in 40 CFR part 63,

the permittee may send the appropriate Regional Office of the EPA a copy of that submittal to satisfy the requirements of 40 CFR Part 63 for that communication.

If acceptable to both the Administrator and the permittee, reports may be submitted on electronic media.

V. Testing Requirements

1. Miscellaneous Process Vents
See the applicable sections in Part II for miscellaneous process vents in A.V., referencing 40 CFR Part 63, Subpart CC.

2. [61.342(g)] COMPLIANCE WITH GENERAL STANDARDS - 40 CFR Part 61, Subpart FF
Compliance with this subpart will be determined by review of facility records and results from tests and inspections using methods and procedures specified in 40 CFR 61.355 [see section A.V.].

3. [61.355] TEST METHODS, PROCEDURES, AND COMPLIANCE PROVISIONS - 40 CFR Part 61, Subpart FF - National Emission Standard for Benzene Waste Operations

   a. [61.355(a)]
   The permittee shall determine the total annual benzene quantity from facility waste by the following procedure:

      i. [61.355(a)(1)]
      For each waste stream subject to this subpart having a flow-weighted annual average water content greater than 10 percent water, on a volume basis as total water, or is mixed with water or other wastes at any time and the resulting mixture has an annual average water content greater than 10 percent as specified in 40 CFR 61.342(a) [see section A.II.], the permittee shall:

         (a) [61.355(a)(1)(i)]
         Determine the annual waste quantity for each waste stream using the procedures specified in 40 CFR 61.355(b).

         (b) [61.355(a)(1)(ii)]
         Determine the flow-weighted annual average benzene concentration for each waste stream using the procedures specified in 40 CFR 61.355(c).

         (c) [61.355(a)(1)(iii)]
         Calculate the annual benzene quantity for each waste stream by multiplying the annual waste quantity of the waste stream times the flow-weighted annual average benzene concentration.

      ii. [61.355(a)(2)]
      Total annual benzene quantity from facility waste is calculated by adding together the annual benzene quantity for each waste stream generated during the year and the annual benzene quantity for each process unit turnaround waste annualized according to 40 CFR 61.355(b)(4).

iii. [61.355(a)(3)]
The permittee shall comply with the requirements of 40 CFR 61.342(c) , 40 CFR 61.342(d) , or (e) [see section A.II.].

iv. [61.355(a)(4)]
If the total annual benzene quantity from facility waste is less than 10 Mg/yr (11 ton/yr) but is equal to or greater than 1 Mg/yr (1.1 ton/yr), then the permittee shall:

(a) [61.355(a)(4)(i)]
Comply with the record keeping requirements of 40 CFR 61.356 and reporting requirements of 40 CFR 61.357 [see sections A.III and A.IV]; and

(b) [61.355(a)(4)(ii)]
Repeat the determination of total annual benzene quantity from facility waste at least once per year and whenever there is a change in the process generating the waste that could cause the total annual benzene quantity from facility waste to increase to 10 Mg/yr (11 ton/yr) or more.

v. [61.355(a)(5)]
If the total annual benzene quantity from facility waste is less than 1 Mg/yr (1.1 ton/yr), then the permittee shall:

(a) [61.355(a)(5)(i)]
Comply with the record keeping requirements of 40 CFR 61.356 and reporting requirements of 40 CFR 61.357 [see sections A.III and A.IV]; and

(b) [61.355(a)(5)(ii)]
Repeat the determination of total annual benzene quantity from facility waste whenever there is a change in the process generating the waste that could cause the total annual benzene quantity from facility waste to increase to 1 Mg/yr (1.1 ton/yr) or more.

vi. [61.355(a)(6)]
The benzene quantity in a waste stream that is generated less than one time per year, except as provided for process unit turnaround waste in paragraph (b)(4) of 40 CFR 61.355, shall be included in the determination of total annual benzene quantity from facility waste for the year in which the waste is generated unless the waste stream is otherwise excluded from the determination of total annual benzene quantity from facility waste in accordance with paragraphs (a) through (c) of 40 CFR 61.355. The benzene quantity in this waste stream shall not be annualized or averaged over the time interval between the activities that resulted in generation of the waste, for purposes of determining the total annual benzene quantity from facility waste.

b. [61.355(b)]
For purposes of the calculation required by 40 CFR 61.355(a) [See Section A.V], the permittee shall determine the annual waste quantity at the point of waste generation, unless otherwise provided in 40 CFR 61.355(b)(1), (3), and (4), by one of the methods given in 40 CFR 61.355(b)(5) through (7).

i. [61.355(b)(1)]
The determination of annual waste quantity for sour water streams that are processed in sour water strippers shall be made at the point that the water exits the sour water stripper.

ii. [61.355(b)(3)]
The determination of annual waste quantity for wastes that are received at hazardous waste treatment, storage, or disposal facilities from offsite shall be made at the point where the waste enters the hazardous waste treatment, storage, or disposal facility.

iii. [61.355(b)(4)]
The determination of annual waste quantity for each process unit turnaround waste generated only at 2 year or greater intervals, may be made by dividing the total quantity of waste generated during the most recent process unit turnaround by the time period (in the nearest tenth of a year) between the turnaround resulting in generation of the waste and the most recent preceding process turnaround for the unit. The resulting annual waste quantity shall be included in the calculation of the annual benzene quantity as provided in 40 CFR 61.355(a)(1)(iii) for the year in which the turnaround occurs and for each subsequent year until the unit undergoes the next process turnaround. For estimates of total annual benzene quantity as specified in the 90-day report, required under 40 CFR 61.357(a)(1) [see section A.IV.], the permittee shall estimate the waste quantity generated during the most recent turnaround, and the time period between turnarounds in accordance with good engineering practices. If the permittee chooses not to annualize process unit turnaround waste, as specified in this paragraph, then the process unit turnaround waste quantity shall be included in the calculation of the annual benzene quantity for the year in which the turnaround occurs.

iv. [61.355(b)(5)]
Select the highest annual quantity of waste managed from historical records representing the most recent 5 years of operation or, if the facility has been in service for less than 5 years but at least 1 year, from historical records representing the total operating life of the facility;

v. [61.355(b)(6)]
Use the maximum design capacity of the waste management unit; or

vi. [61.355(b)(7)]
Use measurements that are representative of maximum waste generation rates.

c. [61.355(c)]
For the purposes of the calculation required by 40 CFR 61.355(a), the permittee shall determine the flow-weighted annual average benzene concentration in a manner that meets the requirements given in paragraph (c)(1) of 40 CFR 61.355 using either of the methods given in paragraphs (c)(2) and (c)(3) of 40 CFR 61.355.

i. [61.355(c)(1)]

The determination of flow-weighted annual average benzene concentration shall meet all of the following criteria:

(a) [61.355(c)(1)(i)]
The determination shall be made at the point of waste generation except for the specific cases given in paragraphs (c)(1)(i)(A) through (D) of 40 CFR 61.355.

(i) [61.355(c)(1)(i)(A)]
The determination for sour water streams that are processed in sour water strippers shall be made at the point that the water exits the sour water stripper.

(ii) [61.355(c)(1)(i)(C)]
The determination for wastes that are received from offsite shall be made at the point where the waste enters the hazardous waste treatment, storage, or disposal facility.

(iii) [61.355(c)(1)(i)(D)]
The determination of flow-weighted annual average benzene concentration for process unit turnaround waste shall be made using either of the methods given in paragraph (c)(2) or (c)(3) of 40 CFR 61.355. The resulting flow-weighted annual average benzene concentration shall be included in the calculation of annual benzene quantity as provided in paragraph (a)(1)(iii) of 40 CFR 61.355 for the year in which the turnaround occurs and for each subsequent year until the unit undergoes the next process unit turnaround.

(b) [61.355(c)(1)(ii)]
Volatilization of the benzene by exposure to air shall not be used in the determination to reduce the benzene concentration.

(c) [61.355(c)(1)(iii)]
Mixing or diluting the waste stream with other wastes or other materials shall not be used in the determination to reduce the benzene concentration.

(d) [61.355(c)(1)(iv)]
The determination shall be made prior to any treatment of the waste that removes benzene, except as specified in paragraphs (c)(1)(i)(A) through (D) of 40 CFR 61.355.

(e) [61.355(c)(1)(v)]
For wastes with multiple phases, the determination shall provide the weighted-average benzene concentration based on the benzene concentration in each phase of the waste and the relative proportion of the phases.

ii. [61.355(c)(2)]

Knowledge of the waste. The permittee shall provide sufficient information to document the flow-weighted annual average benzene concentration of each waste stream. Examples of information that could constitute knowledge include material balances, records of chemicals purchases, or previous test results provided the results are still relevant to the current waste stream conditions. If test data are used, then the permittee shall provide documentation describing the testing protocol and the means by which sampling variability and analytical variability were accounted for in the determination of the flow-weighted annual average benzene concentration for the waste stream. When a permittee and the Administrator do not agree on determinations of the flow-weighted annual average benzene concentration based on knowledge of the waste, the procedures under 40 CFR 61.355(c)(3) shall be used to resolve the disagreement.

iii. [61.355(c)(3)]
Measurements of the benzene concentration in the waste stream in accordance with the following procedures:

(a) [61.355(c)(3)(i)]
Collect a minimum of three representative samples from each waste stream. Where feasible, samples shall be taken from an enclosed pipe prior to the waste being exposed to the atmosphere.

(b) [61.355(c)(3)(ii) and (c)(3)(ii)(A) through (H)]
For waste in enclosed pipes, the following procedures shall be used:

(i) Samples shall be collected prior to the waste being exposed to the atmosphere in order to minimize the loss of benzene prior to sampling.

(ii) A static mixer shall be installed in the process line or in a by-pass line unless the permittee demonstrates that installation of a static mixer in the line is not necessary to accurately determine the benzene concentration of the waste stream.

(iii) The sampling tap shall be located within two pipe diameters of the static mixer outlet.

(iv) Prior to the initiation of sampling, sample lines and cooling coil shall be purged with at least four volumes of waste.

(v) After purging, the sample flow shall be directed to a sample container and the tip of the sampling tube shall be kept below the surface of the waste during sampling to minimize contact with the atmosphere.

(vi) Samples shall be collected at a flow rate such that the cooling coil is able to maintain a waste temperature less than 10°C.

(vii) After filling, the sample container shall be capped immediately (within 5 seconds) to leave a minimum headspace in the container.

(viii) The sample containers shall immediately be cooled and maintained at a temperature below 10°C for transfer to the laboratory.

(c) [61.355(c)(3)(iii)]
When sampling from an enclosed pipe is not feasible, a minimum of three representative samples shall be collected in a manner to minimize exposure of the sample to the atmosphere and loss of benzene prior to sampling.

(d) [61.355(c)(3)(iv) and (c)(3)(iv)(A) through (F)]
Each waste sample shall be analyzed using one of the following test methods for determining the benzene concentration in a waste stream:

(i) Method 8020, Aromatic Volatile Organics, in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in 40 CFR 61.18);

(ii) Method 8021, Volatile Organic Compounds in Water by Purge and Trap Capillary Column Gas Chromatography with Photoionization and Electrolytic Conductivity Detectors in Series in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in 40 CFR 61.18);

(iii) Method 8240, Gas Chromatography/Mass Spectrometry for Volatile Organics in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified 40 CFR 61.18);

(iv) Method 8260, Gas Chromatography/Mass Spectrometry for Volatile Organics: Capillary Column Technique in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in 40 CFR 61.18);

(v) Method 602, Purgeable Aromatics, as described in 40 CFR part 136, appendix A, Test Procedures for Analysis of Organic Pollutants, for wastewaters for which this is an approved EPA methods; or

(vi) Method 624, Purgeables, as described in 40 CFR part 136, appendix A, Test Procedures for Analysis of Organic Pollutants, for wastewaters for which this is an approved EPA method.

(e) [61.355(c)(3)(v)]

The flow-weighted annual average benzene concentration shall be calculated by averaging the results of the sample analyses as follows:

$$C = 1 / Q_t \times \sum_{i=1}^{n} (Q_i \times C_i)$$

Where:
C=Flow-weighted annual average benzene concentration for waste stream, ppmw.
Q_t=Total annual waste quantity for waste stream, kg/yr (lb/yr).
n=Number of waste samples (at least 3).
Q_i=Annual waste quantity for waste stream represented by C_i, kg/yr (lb/yr).
C_i=Measured concentration of benzene in waste sample i, ppmw.

d. [61.355(d)]
A permittee using performance tests to demonstrate compliance of a treatment process with 40 CFR 61.348(a)(1)(i) [see section A.II.] shall measure the flow-weighted annual average benzene concentration of the waste stream exiting the treatment process by collecting and analyzing a minimum of three representative samples of the waste stream using the procedures in 40 CFR 61.355(c)(3). The test shall be conducted under conditions that exist when the treatment process is operating at the highest inlet waste stream flow rate and benzene content expected to occur. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a test. The permittee shall record all process information as is necessary to document the operating conditions during the test.

e. [61.355(e)]
The permittee using performance tests to demonstrate compliance of a treatment process with 40 CFR 61.348(a)(1)(ii) [see section A.II] shall determine the percent reduction of benzene in the waste stream on a mass basis by the following procedure:

i. [61.355(e)(1)]
The test shall be conducted under conditions that exist when the treatment process is operating at the highest inlet waste stream flow rate and benzene content expected to occur. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a test. The permittee shall record all process information as is necessary to document the operating conditions during the test.

ii. [61.355(e)(2)]
All testing equipment shall be prepared and installed as specified in the appropriate test methods.

iii. [61.355(e)(3)]
The mass flow rate of benzene entering the treatment process (E_b) shall be determined by computing the product of the flow rate of the waste stream entering the treatment process, as determined by the inlet flow meter, and the benzene concentration of the waste stream, as determined using the sampling and analytical

procedures specified in paragraph (c)(2) or (c)(3) of 40 CFR 61.355. Three grab samples of the waste shall be taken at equally spaced time intervals over a 1-hour period. Each 1-hour period constitutes a run, and the performance test shall consist of a minimum of 3 runs conducted over a 3-hour period. The mass flow rate of benzene entering the treatment process is calculated as follows:

$$E_b = K / (n \times 10^6) \times [\sum_{i=1}^{n} V_i C_i]$$

Where:
E_b=Mass flow rate of benzene entering the treatment process, kg/hour.
K=Density of the waste stream, kg/m^3 (lb/ft^3).
V_i=Average volume flow rate of waste entering the treatment process during each run i, m^{3}hour (ft^3).
C_i=Average concentration of benzene in the waste stream entering the treatment process during each run i, ppmw.
n=Number of runs.
10^6 = Conversion for ppmw

iv. [61.355(e)(4)]
The mass flow rate of benzene exiting the treatment process (E_a) shall be determined by computing the product of the flow rate of the waste stream exiting the treatment process, as determined by the outlet flow meter or the inlet flow meter, and the benzene concentration of the waste stream, as determined using the sampling and analytical procedures specified in paragraph (c)(2) or (c)(3) of 40 CFR 61.355. Three grab samples of the waste shall be taken at equally spaced time intervals over a 1-hour period. Each 1-hour period constitutes a run, and the performance test shall consist of a minimum of 3 runs conducted over the same 3-hour period at which the mass flow rate of benzene entering the treatment process is determined. The mass flow rate of benzene exiting the treatment process is calculated as follows:

$$E_a = K / (n \times 10^6) \times [\sum_{i=1}^{n} V_i C_i]$$

Where:
E_a=Mass flow rate of benzene exiting the treatment process, kg/hour (lb/hr).
K=Density of the waste stream, kg/m^3 (lb/ft^3).
V_i=Average volume flow rate of waste exiting the treatment process during each run i, m^3/hour (ft^3/hr).
C_i=Average concentration of benzene in the waste stream exiting the treatment process during each run i, ppmw.

n=Number of runs.
10^6 = Conversion factor for ppmw

f. [61.355(f)]
The permittee using performance tests to demonstrate compliance of a treatment process with 40 CFR 61.348(a)(1)(iii) [see section A.II] shall determine the benzene destruction efficiency for the combustion unit by the following procedure:

i. [61.355(f)(1)]
The test shall be conducted under conditions that exist when the combustion unit is operating at the highest inlet waste stream flow rate and benzene content expected to occur. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a test. The permittee shall record all process information necessary to document the operating conditions during the test.

ii. [61.355(f)(2)]
All testing equipment shall be prepared and installed as specified in the appropriate test methods.

iii. [61.355(f)(3)]
The mass flow rate of benzene entering the combustion unit shall be determined by computing the product of the flow rate of the waste stream entering the combustion unit, as determined by the inlet flow meter, and the benzene concentration of the waste stream, as determined using the sampling procedures in paragraph (c)(2) or (c)(3) of 40 CFR 61.355. Three grab samples of the waste shall be taken at equally spaced time intervals over a 1-hour period. Each 1-hour period constitutes a run, and the performance test shall consist of a minimum of 3 runs conducted over a 3-hour period. The mass flow rate of benzene into the combustion unit is calculated as follows:

$$E_b = K / (n \times 10^6) \times [\sum_{i=1}^{n} V_i C_i]$$

Where:

E_b=Mass flow rate of benzene into the combustion unit, kg/hour (lb/hr).
K=Density of the waste stream, kg/m^3 (lb/ft^3).
V_i=Average volume flow rate of waste entering the combustion unit during each run i, m^3/hour (ft^3/hr).
C_i=Average concentration of benzene in the waste stream entering the combustion unit during each run i, ppmw.
n=Number of runs.
10^6 = Conversion for ppmw

iv. [61.355(f)(4)]
The mass flow rate of benzene exiting the combustion unit exhaust stack shall be determined as follows:

(a) [61.355(f)(4)(i)]
The time period for the test shall not be less than 3 hours during which at least 3 stack gas samples are collected and be the same time period at which the mass flow rate of benzene entering the treatment process is determined. Each sample shall be collected over a 1-hour period (e.g., in a tedlar bag) to represent a time-integrated composite sample and each 1-hour period shall correspond to the periods when the waste feed is sampled.

(b) [61.355(f)(4)(ii)]
A run shall consist of a 1-hour period during the test. For each run:

(i) [61.355(f)(4)(ii)(A)]
The reading from each measurement shall be recorded;

(ii) [61.355(f)(4)(ii)(B)]
The volume exhausted shall be determined using method 2, 2A, 2C, or 2D from appendix A of 40 CFR part 60, as appropriate.

(iii) [61.355(f)(4)(ii)(C)]
The average benzene concentration in the exhaust downstream of the combustion unit shall be determined using method 18 from appendix A of 40 CFR part 60.

(c) [61.355(f)(4)(iii)]
The mass of benzene emitted during each run shall be calculated as follows:

$M_i = D_b VC(10^{-6})$

Where:
M_i=Mass of benzene emitted during run i, kg (lb).
V=Volume of air-vapor mixture exhausted at standard conditions, m^3 (ft^3).
C=Concentration of benzene measured in the exhaust, ppmv.
D_b = Density of benzene = 3.24 kg/m^3 (0.202 lb/ft^3)
10^{-6} = Conversion factor for ppmv.

(d) [61.355(f)(4)(iv)]
The benzene mass emission rate in the exhaust shall be calculated as follows:

$$E_a = \left(\sum_{i=1}^{n} M_i\right) / T$$

Where:

E_a=Mass flow rate of benzene emitted, kg/hour lb/hr).
M_i=Mass of benzene emitted during run i, kg (lb).
T=Total time of all runs, hour.
n=Number of runs.

v. [61.355(f)(5)]
The benzene destruction efficiency for the combustion unit shall be calculated as follows:

$$R = (E_b - E_a) / E_b \times 100$$

Where:
R=Benzene destruction efficiency for the combustion unit, percent.
E_b=Mass flow rate of benzene into the combustion unit, kg/hour (lb/hr).
E_a=Mass flow of benzene from the combustion unit, kg/hour (lb/hr).

g. [61.355(g)]
A permittee using performance tests to demonstrate compliance of a wastewater treatment system unit with 61.348(b) [see section A.II.] shall measure the flow-weighted annual average benzene concentration of the wastewater stream where the waste stream enters an exempt waste management unit by collecting and analyzing a minimum of three representative samples of the waste stream using the procedures in 40 CFR 61.355(c)(3). The test shall be conducted under conditions that exist when the wastewater treatment system is operating at the highest inlet wastewater stream flow rate and benzene content expected to occur. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a test. The permittee shall record all process information as is necessary to document the operating conditions during the test.

h. [61.355(h)]
The permittee shall test equipment for compliance with no detectable emissions as required in 40 CFR 61.343 through 61.347 and 61.349 [see sections A.II and A.III.] in accordance with the following requirements:

i. [61.355(h)(1)]
Monitoring shall comply with Method 21 from appendix A of 40 CFR Part 60.

ii. [61.355(h)(2)]
The detection instrument shall meet the performance criteria of Method 21.

iii. [61.355(h)(3)]
The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21.

iv. [61.355(h)(4); (h)(4)(i) and (4)(ii)]
Calibration gases shall be with zero air (less than 10 ppm of hydrocarbon in air); and a mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

v. [61.355(h)(5)]
The background level shall be determined as set forth in Method 21.

vi [61.355(h)(6)]
The instrument probe shall be traversed around all potential leak interfaces as close as possible to the interface as described in Method 21.

vii. [61.355(h)(7)]
The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared to 500 ppm for determining compliance.

i. [61.355(i)]
A permittee using a performance test to demonstrate compliance of a control device with either the organic reduction efficiency requirement or the benzene reduction efficiency requirement specified under 40 CFR 61.349(a)(2) [see section A.II.] shall use the following procedures:

i. [61.355(i)(1)]
The test shall be conducted under conditions that exist when the waste management unit vented to the control device is operating at the highest load or capacity level expected to occur. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a test. The permittee shall record all process information necessary to document the operating conditions during the test.

ii. [61.355(i)(2)]
Sampling sites shall be selected using Method 1 or 1A from 40 CFR Part 60, appendix A, as appropriate.

iii. [61.355(i)(3)]
The mass flow rate of either the organics or benzene entering and exiting the control device shall be determined as follows:

(a) [61.355(i)(3)(i)]
The time period for the test shall not be less than 3 hours during which at least 3 stack gas samples are collected. Samples of the vent stream entering and exiting the control device shall be collected during the same time period. Each sample shall be collected over a 1-hour period (e.g., in a tedlar bag) to represent a time-integrated composite sample.

(b) [61.355(i)(3)(ii) and (i)(3)(ii)(A) through (C)]
A run shall consist of a 1-hour period during the test. For each run:
(i) The reading from each measurement shall be recorded;

(ii) The volume exhausted shall be determined using Method 2, 2A, 2C, or 2D from 40 CFR Part 60, appendix A, as appropriate;

(iii) The organic concentration or the benzene concentration, as appropriate, in the vent stream entering and exiting the control shall be determined using Method 18 from 40 CFR Part 60, appendix A.

(c) [61.355(i)(3)(iii)]
The mass of organics or benzene entering and exiting the control device during each run shall be calculated as follows:

$$M_{aj} = (K_1 V_{aj}) / 10^6) \times (\sum_{i=1}^{n} C_{ai} MW_i)$$

$$M_{bj} = (K_1 V_{bj}) / 10^6) \times (\sum_{i=1}^{n} C_{bi} MW_i)$$

Where:

M_{aj}=Mass of organics or benzene in the vent stream entering the control device during run j, kg(lb).
M_{bj}=Mass of organics or benzene in vent stream exiting the control device during run j, kg(lb).
V_{aj}=Volume of vent stream entering the control device during run j at standards conditions, $m^3(ft^3)$.
V_{bj}=Volume of vent stream exiting the control device during run j at standards conditions, $m^3(ft^3)$.
C_{ai}=Organic concentration of compound i or benzene concentration measured in the vent stream entering the control device as determined by Method 18, ppm by volume on a dry basis.
C_{bi}=Organic concentration of compound i measured in the vent stream exiting the control device as determined by method 18, ppm by volume on a dry basis.
MW_i=Molecular weight of organic compound i in the vent stream or molecular weight of benzene, kg/kg-mo1(lb/lb-mole).
n=Number of organic compounds in the vent stream; if benzene reduction efficiency is being demonstrated, then n=1.
K_1 =Conversion factor for molar volume=0.0416 kg-mol/m^3 (at 293°K and 760 mm Hg(527 R and 14.7 psia)). = 0.0416 kg-mol/m^3 (0.00118lb-mol/ft^3)
10^{-6}=Conversion factor for ppmv.

(d) [61.355(i)(3)(iv)]
The mass flow rate of organics or benzene entering and exiting the control device shall be calculated using as follows:

$$E_a = (\sum_{j=1}^{n} M_{aj}) / T$$

$$E_b = (\sum_{j=1}^{n} M_{bj}) / T$$

E_a=Mass flow rate of organics or benzene entering the control device, kg/hr (lb/hr).
E_b=Mass flow rate of organics or benzene exiting the control device, kg/hr (lb/hr).
M_{aj}=Mass of organics or benzene in the vent stream entering the control device during run j, kg (lb).
M_{bj}=Mass of organics or benzene in vent stream exiting the control device during run j, kg (lb).
T=Total time of all runs, hour.
n=Number of runs.

iv. [61.355(i)(4)]

The organic reduction efficiency for the control device shall be calculated as follows:

$$R = (E_a - E_b) / E_a$$

Where:
R=Total organic reduction efficiency or benzene reduction efficiency for the control device, percent.
E_b=Mass flow rate of organics or benzene entering the control device, kg/hr (lb/hr).
E_a=Mass flow rate of organics or benzene emitted from the control device, kg/hr (lb/hr).

j. [61.355(j)]
A permittee shall determine the benzene quantity for the purposes of the calculation required by 40 CFR 61.342(c)(3)(ii)(B) [see section A.II.], according to the provisions of 40 CFR 61.355(a) [See section A.V], except that the procedures in 40 CFR 61.355(a) shall also apply to wastes with a water content of 10 percent or less.

k. [61.355(k)]
The permittee shall determine the benzene quantity for the purposes of the calculation required by 40 CFR 61.342(e)(2) [see section A.II] by the following procedure:

i. [61.355(k)(1)]
For each waste stream that is not controlled for air emissions in accordance with 40 CFR 61.343. 61.344, 61.345, 61.346, 61.347, or 61.348(a), as applicable to the waste management unit that manages the waste, the benzene quantity shall be determined as specified in paragraph (a) of 40 CFR 61.355, except that paragraph (b)(4) of 40

CFR 61.355 shall not apply, i.e., the waste quantity for process unit turnaround waste is not annualized but shall be included in the determination of benzene quantity for the year in which the waste is generated for the purposes of the calculation required by 40 CFR 61.342(e)(2).

$R = (E_a - E_b) / E_a \times 100$

ii. [61.355(k)(2)]

For each waste stream that is controlled for air emissions in accordance with 40 CFR 61.343. 61.344, 61.345, 61.346, 61.347, or 61.348(a) [see section A.II], as applicable to the waste management unit that manages the waste, the determination of annual waste quantity and flow-weighted annual average benzene concentration shall be made at the first applicable location as described in paragraphs (k)(2)(i), (k)(2)(ii), and (k)(2)(iii) of 40 CFR 61.355 and prior to any reduction of benzene concentration through volatilization of the benzene, using the methods given in (k)(2)(iv) and (k)(2)(v) of 40 CFR 61.355.

(a) [61.355(k)(2)(i)]
where the waste stream enters the first waste management unit not complying with 40 CFR 61.343, 61.344, 61.345, 61.346, 61.347, and 61.348(a) that are applicable to the waste management unit,

(b) [61.355(k)(2)(ii)]
For each waste stream that is managed or treated only in compliance with 40 CFR 61.343 through 61.348(a) up to the point of final direct discharge from the facility, the determination of benzene quantity shall be prior to any reduction of benzene concentration through volatilization of the benzene, or

(c) [61.355(k)(2)(iii)]
For wastes managed in units controlled for air emissions in accordance with 40 CFR 61.343, 61.344, 61.345, 61.346, 61.347, and 61.348(a), and then transferred offsite, facilities shall use the first applicable offsite location as described in paragraphs (k)(2)(i) and (k)(2)(ii) of 40 CFR 61.355 if they have documentation from the offsite facility of the benzene quantity at this location. Facilities without this documentation for offsite wastes shall use the benzene quantity determined at the point where the transferred waste leaves the facility.

(d) [61.355(k)(2)(iv)]
Annual waste quantity shall be determined using the procedures in paragraphs (b)(5), (6), or (7) of 40 CFR 61.355, and

(e) [61.355(k)(2)(v)]
The flow-weighted annual average benzene concentration shall be determined using the procedures in paragraphs (c)(2) or (3) of 40 CFR 61.355.

iii. [61.355(k)(3)]
The benzene quantity in a waste stream that is generated less than one time per year, including process unit turnaround waste, shall be included in the determination of benzene quantity as determined in paragraph (k)(6) of 40 CFR 61.355 for the year in which the waste is generated. The benzene quantity in this waste stream shall not be annualized or averaged over the time interval between the activities that resulted in generation of the waste for purposes of determining benzene quantity as determined in paragraph (k)(6) 40 CFR 61.355.

iv. [61.355(k)(4)]
The benzene in waste entering an enhanced biodegradation unit, as defined in 40 CFR 61.348(b)(2)(ii)(B) [see section A.II], shall not be included in the determination of benzene quantity, determined in paragraph (k)(6) of 40 CFR 61.355, if the following conditions are met:

(a) [61.355(k)(4)(i)]
The benzene concentration for each waste stream entering the enhanced biodegradation unit is less than 10 ppmw on a flow-weighted annual average basis, and

(b) [61.355(k)(4)(ii)]
All prior waste management units managing the waste comply with 40 CFR 61.343, 61.344, 61.345, 61.346, 61.347 and 61.348(a) [see section A.II].

v. [61.355(k)(5)]
The benzene quantity for each waste stream in paragraph (k)(2) of 40 CFR 61.355 shall be determined by multiplying the annual waste quantity of each waste stream times its flow-weighted annual average benzene concentration.

vi. [61.355(k)(6)]
The total benzene quantity for the purposes of the calculation required by 40 CFR 61.342(e)(2) [see section A.II] shall be determined by adding together the benzene quantities determined in paragraphs (k)(1) and (k)(5) of 40 CFR 61.355 for each applicable waste stream.

vii. [40 CFR 61.355(k)(7)]
If the benzene quantity determined in paragraph (6) of 40 CFR 61.355 exceeds 6.0 Mg/yr (6.6 ton/yr) only because of multiple counting of the benzene quantity for a waste stream, the permittee may use the following procedures for the purposes of the calculation required by 40 CFR 61.342(e)(2) [see section A.II]:

(a) [61.355(k)(7)(i)]
Determine which waste management units are involved in the multiple counting of benzene;

(b) [61.355(k)(7)(ii)]
Determine the quantity of benzene that is emitted, recovered, or removed from the affected units identified in paragraph (k)(7)(i) of 40 CFR 61.355, or

destroyed in the units if applicable, using either direct measurements or the best available estimation techniques developed or approved by the Administrator of USEPA.

(c) [61.355(k)(7)(iii)]
Adjust the benzene quantity to eliminate the multiple counting of benzene based on the results from paragraph (k)(7)(ii) of 40 CFR 61.355 and determine the total benzene quantity for the purposes of the calculation required by 40 CFR 61.342(e)(2).

(d) [61.355(k)(7)(iv)]
Submit in the annual report required under 40 CFR 61.357(a) [see section A.IV] a description of the methods used and the resulting calculations for the alternative procedure under paragraph (k)(7) of 40 CFR 61.355, the benzene quantity determination from paragraph (k)(6) of 40 CFR 61.355, and the adjusted benzene quantity determination from paragraph (k)(7)(iii) of 40 CFR 61.355.

4. Testing Requirements - 40 CFR Part 60, Subpart QQQ

a. [60.692-1(b)]
Compliance with 40 CFR 60.692-1 to 60.692-5 and with 60.693-1 and 60.693-2 will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in 40 CFR 60.696.

b. [60.696] Performance test methods and procedures and compliance provisions - 40 CFR Part 60, Subpart QQQ

i. [60.696(a)]
Before using any equipment installed in compliance with the requirements of 40 CFR 60.692-2, 60.692-3, 60.692-4, 60.692-5, or 60.693 [see section A.II], the permittee shall inspect such equipment for indications of potential emissions, defects, or other problems that may cause the requirements of this subpart not to be met. Points of inspection shall include, but are not limited to, seals, flanges, joints, gaskets, hatches, caps, and plugs.

ii. [60.696(b)]
The permittee of each source that is equipped with a closed vent system and control device as required in 40 CFR 60.692-5 [see section A.II] (other than a flare) is exempt from 40 CFR 60.8 of the General Provisions and shall use Method 21 to measure the emission concentrations, using 500 ppm as the no detectable emission limit. The instrument shall be calibrated each day before using. The calibration gases shall be:

(a) [60.696(b)(1)]
Zero air (less than 10 ppm of hydrocarbon in air), and

(b) [60.696(b)(2)]

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

iii. [60.696(c)]
The permittee shall conduct a performance test initially, and at other times as requested by the Administrator, using the test methods and procedures in 40 CFR 60.18(f) to determine compliance of flares.

iv. [60.696(d)]
After installing the control equipment required to meet 40 CFR 60.693-2(a) or whenever sources that have ceased to treat refinery wastewater for a period of 1 year or more are placed back into service, the permittee shall determine compliance with the standards in 40 CFR 60.693-2(a) as follows:

(a) [60.696(d)(1)]
The maximum gap widths and maximum gap areas between the primary seal and the separator wall and between the secondary seal and the separator wall shall be determined individually within 60 calendar days of the initial installation of the floating roof and introduction of refinery wastewater or 60 calendar days after the equipment is placed back into service using the following procedure when the separator is filled to the design operating level and when the roof is floating off the roof supports.

(i) [60.696(d)(1)(i)]
Measure seal gaps around the entire perimeter of the separator in each place where a 0.32 cm (0.125 in.) diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the wall of the separator and measure the gap width and perimetrical distance of each such location.

(ii) [60.696(d)(1)(ii)]
The total surface area of each gap described in 40 CFR 60.696(d)(1)(i) shall be determined by using probes of various widths to measure accurately the actual distance from the wall to the seal and multiplying each such width by its respective perimetrical distance.

(iii) [60.696(d)(1)(iii)]
Add the gap surface area of each gap location for the primary seal and the secondary seal individually, divide the sum for each seal by the nominal perimeter of the separator basin and compare each to the maximum gap area as specified in 40 CFR 60.693-2 [see section A.II].

(b) [60.696(d)(2)]
The gap widths and total gap area shall be determined using the procedure in 40 CFR 60.696(d)(1) according to the following frequency:

(i) [60.696(d)(2)(i)]
For primary seals, once every 5 years.

(ii) [60.696(d)(2)(ii)]
For secondary seals, once every year.

VI. Miscellaneous Requirements

1. The permittee shall bring into compliance with 40 CFR Part 60, Subpart QQQ IDS's 1, 2, 3, 6, 15, 16, and the OWS according to the following compliance schedule:

   a. Complete the assessment of all equipment subject to Subpart QQQ requirements for current controls versus the standard by December 31, 2003.

   b. Request a variance from USEPA and submit a list of equipment and documentation for those emissions units where complying with the standard is not feasible due to safety or operational concerns by December 31, 2003.

   c. Submit to USEPA a complete list of remedial activities that will bring all storage tanks subject to QQQ into compliance with control standards by Sept. 30, 2004.

   d. Submit to USEPA a complete list of remedial activities to bring 50% of all junction boxes subject to Subpart QQQ into compliance with control standards by December 31, 2004.

   e. Submit to USEPA a complete list of remedial activities to bring the remaining junction boxes and equipment subject to Subpart QQQ into compliance with control standards by December 31, 2005.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P010 - CCR Regenerator Stack	*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 63.1566(a)	See section A.I.2.c.
	40 CFR Part 63.1567(a)	See section A.I.2.c.
	40 CFR Part 63.1569(a)	See section A.I.2.c.
	40 CFR Part 63.1577	See section A.I.2.d.
	equipment leaks	
	40 CFR Part 63, Subpart A	See sections A.I.2.e and A.I.2.f.
	40 CFR Part 63, Subpart CC	See sections A.I.2.f and A.I.2.g.
	OAC rule 3745-21-09(T)	See section A.I.2.h.

2. Additional Terms and Conditions

2.a. The permittee shall comply with the emission limitations and work practice standards for existing emissions units in 40 CFR Part 63, Subpart UUU by no later than April 11, 2005.

2.b. The permittee shall meet the notification requirements in 40 CFR Part 63.1574 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 this subpart.

2.c. The permittee shall comply with the applicable emission limitations specified in 40 CFR Part 63.1566(a)(1) [see Table 15 of section A.VI.]; 63.1567(a)(1) [see Table 16 of section A.VI.] and 63.1569(a)(1) [see Table 36 of section A.VI.] by no later than April 11, 2005.

i. [63.1566(a)(1)(i)]
The permittee can elect to vent emissions of total organic compounds (TOC) to a flare that meets the control device requirements in 40 CFR Part 63.11(b) (Option 1); or

ii. [63.1566(a)(1)(i)]
The permittee can elect to use a control device to meet a TOC percent reduction standard or concentration limit, whichever is less stringent (Option 2).

iii. [63.1567(a)(1); (a)(1)(i) and (a)(a)(ii)]
The permittee must meet each emission limitation in Table 22 [see section A.VI.] that applies to this unit. These emission limitations apply during coke burn-off and catalyst rejuvenation. The permittee can choose from the following two options: elect to use a control device to meet either a percent reduction standard for hydrogen chloride (HCl) emissions (Option 1); or elect to meet an HCl concentration limit (Option 2).

iv. [63.1569(a)(1)(i) through (a)(1)(iv)]
The permittee can choose from four options for meeting with the work practice standards for bypass lines:
(a) Elect to install an automated system (Option 1);
(b) Elect to use a manual lock system (Option 2);
(c) Elect to seal the line (Option 3); or
(d) Elect to vent to a control device (Option 4).

v. [63.1569(a)(2)]
As provided in 40 CFR 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.] of this section.

2.d. Table 44 [see section A.VI.] of 40 CFR Part 63, Subpart UUU shows which parts of the General Provisions in 40 CFR Part 63.1 through 63.15 apply.

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

2.f. Table 6 of 40 CFR Part 63, Subpart CC specifies the provisions of 40 CFR Part 63, Subpart A that apply and those that do not apply to permittees of emissions units subject to Subpart CC of 40 CFR Part 63.

2.g. Refer to Part II of this permit for the applicable equipment leak provisions found in sections A.I.2., A.II., A.III., A.IV. and A.V., referencing 40 CFR Part 60, Subpart VV.

2.h. Refer to Part II of this permit for the state requirements for equipment leaks found in sections A.I.2., A.II., A.III., A.IV. and A.V., referencing OAC rule 3745-21-09(T).

II. Operational Restrictions

1. See the applicable sections in Part II for equipment leaks in section A.II., referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward.

2. [63.1566] REQUIREMENTS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS - 40 CFR Part 63, Subpart UUU

   a. [63.1566(a)(2)]
   The permittee shall comply with each site-specific operating limit in Table 16 [see section A.VI.] that applies to this emissions unit.

   b. [63.1566(a)(3)]
   The emission limitations in Tables 15 and 16 [see section A.VI.] apply to emissions from catalytic reforming unit process vents that occur during depressuring and purging operations. These process vents include those used during unit depressurization, purging, coke burn, catalyst rejuvenation, and reduction or activation purge.

   c. [63.1566(a)(4)]
   The emission limitations in Tables 15 and 16 [see section A.VI.] do not apply to emissions from process vents during depressuring and purging operations when the reactor vent pressure is 5 pounds per square inch gauge (psig) or less.

3. [63.1567] REQUIREMENTS FOR INORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS - 40 CFR Part 63, Subpart UUU

   a. [63.1567(a)(2)]
   The permittee must meet each site-specific operating limit in Table 23 [see section A.VI.] that applies to this emissions unit. These operating limits apply during coke burn-off and catalyst rejuvenation.

III. Monitoring and/or Record Keeping Requirements

1. See the applicable sections in Part II for equipment leaks in section A.III., referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward.

2. [63.1566] REQUIREMENTS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS - 40 CFR Part 63, Subpart UUU

   a. [63.1566(a)(5)]
   The permittee shall prepare an operation, maintenance, and monitoring plan according to the requirements in 40 CFR Part 63.1574(f) [see section A.III.] and operate at all times according to the procedures in the plan.

   b. [63.1566(b)(1)]

The permittee shall 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 17 [see section A.VI.].

3. [63.1567] REQUIREMENTS FOR INORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS - 40 CFR Part 63, Subpart UUU

   a. [63.1567(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.III.] and operate at all times according to the procedures in the plan.

   b. [63.1567(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 24 [see section A.VI.].

4. [63.1569] REQUIREMENTS FOR HAP EMISSIONS FROM BYPASS LINES - 40 CFR Part 63, Subpart UUU
   The work practice standards the permittee must meet are those of 63.1569(a)(1) and (a)(2) [see section A.I.2.] and the following:

   a. [63.1569(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.III.] and operate at all times according to the procedures in the plan.

5. [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 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.

6. [63.1572(c)] MONITORING, INSTALLATION, OPERATION, AND MAINTENANCE REQUIREMENTS [Table 41] - 40 CFR Part 63, Subpart UUU
The permittee must install, operate, and maintain each continuous parameter monitoring system according to the following paragraphs of this section.

a. [63.1572(c)(1)]
Each continuous parameter monitoring system must be installed, operated, and maintained according to the requirements in Table 41 [see section A.VI.] and in a manner consistent with the manufacturer's specifications or other written procedures that provide adequate assurance that the equipment will monitor accurately.

b. [63.1572(c)(2)]
The continuous parameter monitoring system must complete a minimum of one cycle of operation for each successive 15-minute period. The permittee must have a minimum of four

successive cycles of operation to have a valid hour of data (or at least two if a calibration check is performed during that hour or if the continuous parameter monitoring system is out-of-control).

c. [63.1572(c)(3)]
Each continuous parameter monitoring system must have valid hourly average data from at least 75 percent of the hours during which the process operated.

d. [63.1572(c)(4)]
Each continuous parameter monitoring system must determine and record the hourly average of all recorded readings and if applicable, the daily average of all recorded readings for each operating day. The daily average must cover a 24-hour period if operation is continuous or the number of hours of operation per day if operation is not continuous.

e. [63.1572(c)(5)]
Each continuous parameter monitoring system must record the results of each inspection, calibration, and validation check.

7. [63.1572(d)]
The permittee must monitor and collect data according to the requirements in 63.1572(d)(1) and (d)(2) [see paragraph a. and b. of this section].

a. [63.1572(d)(1)]
Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), the permittee must conduct all monitoring in continuous operation (or collect data at all required intervals) at all times the affected unit is operating.

b. [63.1572(d)(2)]
The permittee may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities for purposes of this regulation, including data averages and calculations, for fulfilling a minimum data availability requirement, if applicable. The permittee must use all the data collected during all other periods in assessing the operation of the control device and associated control system.

8. [63.1573] MONITORING ALTERNATIVES - 40 CFR Part 63, Subpart UUU

a. [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.].

b. [63.1576(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 63.1576(c)(1) through (5) [paragraphs b.i. through b.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.

c. [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 want 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).

d. [63.1573(e)] REQUESTING MONITOR ALTERNATIVE PARAMETERS
The permittee must submit a request for review and approval or disapproval to the Administrator. The request must include the information in 63.1573 (e)(1) through (5) [paragraphs d.i. through d.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.

9. [63.1574(f)] OPERATION, MAINTENANCE AND MONITORING PLAN - 40 CFR Part 63, Subpart UUU
As required by 40 CFR Part 63, Subpart UUU, the permittee must prepare and implement an operation, maintenance, and monitoring plan for each affected 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.

a. [63.1574(f)(1)]
The permittee must submit the plan to the City of Canton Health Department, Division of Air Pollution Control 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 City of Canton Health Department, Division of Air Pollution Control for review and approval and comply with the plan until the change is approved.

b. [63.1574(f)(2) and (f)(2)(i) through (x))]
Each plan must include, at a minimum, the information specified in paragraphs (f)(2)(i) through (x) [paragraphs b.i through b.vi. of this section] of this section.

i. [63.1574(f)(2)(i)]
Process and control device parameters to be monitored for each affected emissions unit, along with established operating limits.

ii. [63.1574(f)(2)(ii)]
Procedures for monitoring emissions and process and control device operating parameters for each affected emissions unit.

iii. [63.1574(f)(2)(vi)]
Procedures the permittee will use to determine the HCl concentration of gases from a semi-regenerative catalytic reforming unit with an internal scrubbing system (i.e., no add-on control device) when you use a colormetric tube sampling system, including procedures for correcting for pressure (if applicable to the sampling equipment).

iv. [63.1574(f)(2)(v)]
Procedures the permittee will use to determine the pH of the water (or scrubbing liquid) exiting a wet scrubber if the permittee uses pH strips.

v. [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).

vi. [63.1574(f)(2)(x)]
Maintenance schedule for each affected emissions unit, monitoring system, and control device that is generally consistent with the manufacturer's instructions for routine and long-term maintenance.

10. [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(c)]
The permittee must keep the records in 40 CFR Part 63.6(h) for visible emission observations.

c. [63.1576(d)]

The permittee must keep records required by Tables 20, 21, 27 and 28 [see section A.VI.] (for catalytic reforming units) and Table 39 [see section A.VI.] (for bypass lines) to show continuous compliance with each emission limitation that applies to this emissions unit.

d. [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.

e. [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.

f. [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).

g. [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.

h. [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. See the applicable sections in Part II for equipment leaks in section A.IV., referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

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.

2. [63.1574] NOTIFICATION SUBMITTAL - 40 CFR Part 63, Subpart UUU

a. [63.1574(a)]
Except as allowed in 40 CFR Part 63.1574(a)(2) and (a)(3) [paragraphs a.i. and a.ii. 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)(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).

ii. [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 your notification of compliance status.

3. [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.

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(f)]
The permittee also must include the information required in 63.1575(f)(1) through (f)(2) [paragraphs e.i. and e.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.

f. [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.

g. [63.1575(h)]
The reporting requirements in paragraphs 63.1575(h)(1) and (2) [paragraphs g.i. and g.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. See the applicable sections in Part II for equipment leaks in section A.V., referencing 40 CFR Part 60, Subpart VV and OAC rule 3745-21-09(T).

The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward.

2. [63.1566] DEMONSTRATING INITIAL COMPLIANCE REQUIREMENTS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS - 40 CFR Part 63, Subpart UUU

a. [63.1566(b)(2)]
The permittee shall conduct each performance test for a catalytic reforming unit according to the requirements in 40 CFR Part 63.1571 [see section A.V.] and under the conditions specified in Table 18 [see section A.VI.] of this subpart.

b. [63.1566(b)(3)]
The permittee shall establish each site-specific operating limit in Table 16 [see section A.VI.] that applies to this emissions unit according to the procedures in Table 18 [see section A.VI.].

c. [63.1566(b)(4) and (b)(5)]
Use the procedures in 63.1566(b)(4)(i) or (b)(5) [paragraphs c.i. or c.ii. of this section] to determine initial compliance with the emission limitations.

i. [63.1566(b)(4)(i)]
If the permittee elects the percent reduction standard under Option 2, calculate the emission rate of TOC using Equation 1 of this section (if you use Method 25) or Equation 2 of this section (if you use Method 25A); then calculate the mass emission reduction using Equation 3 of this section as follows:

(Eq.1) $$E = K_4 \; M_c \; Q_s$$

where:

E = Emission rate of TOC in the vent stream, kilograms-C per hour;
K_4 = Constant, 6.0×10^{-5} (kilograms per milligram)(minutes per hour);
M_c = Mass concentration of total gaseous nonmethane organic as measured and calculated using Method 25 in Appendix A of 40 CFR Part 60, mg/dscm; and
Q_s = Vent stream flow rate, dscm/min, at a temperature of 20 degrees Celsius (C).

(Eq.2) $$E = K_5 \; C_{TOC} \; Q_s$$

where:

E = Emission rate of TOC in the vent stream, kilograms-C per hour;
K_5 = Constant, 9.0 x 10^{-5} (parts per million)$^{-1}$(gram-mole per standard cubic meter) (gram-C per gram-mole-propane) (kilogram per gram) (minutes per hour), where the standard temperature (standard cubic meter) is at 20 degrees C (uses 36g-C/g.mole propane);
C_{TOC} = Concentration of TOC on a dry basis in ppmv as propane as measured by Method 25A in Appendix A of 40 CFR Part 60; and
Q_s = Vent stream flow rate, dry standard cubic meters per minute, at a temperature of 20 degrees C.

(Eq.3)

$$\%\ reduction = \frac{E_i - E_o}{E_i}\ x\ 100\%$$

where:

E_i=Mass
emission rate of TOC at control device inlet, kg/hr; and
E_o = Mass emission rate of TOC at control device outlet, kg/hr.

ii. [63.1566(b)(5)]
If the permittee elects the 20 parts per million by volume (ppmv) concentration limit, correct the measured TOC concentration for oxygen (O_2) content in the gas stream using Equation 4 of this section as follows:

(Eq. 4)

$$C_{TOC,3\%O_2} = C_{TOC}\ (\frac{17.9\%}{20.9\% - \%O_2})$$

d. [63.1566(b)(6)]
The permittee is not required to do a TOC test if:

i. [63.1566(b)(6)(i)]
The permittee elects to vent emissions to a flare as provided in 40 CFR Part 63.1566(a)(1)(i) [see section A.I.2.] of this section (Option 1); or

ii. [63.1566(b)(6)(ii)]
The permittee elects the TOC percent reduction or concentration limit 40 CFR Part 63.1566(a)(1)(ii) of this section (Option 2), and uses a boiler or process heater with a design heat input capacity of 44 MW or greater or a boiler or process heater in which all vent streams are introduced into the flame zone.

e. [63.1566(b)(7)]
The permittee must demonstrate initial compliance with each applicable emission limitation according to Table 19 [see section A.IV.].

f. [63.1566(b)(8)]
The permittee must demonstrate initial compliance with the work practice standard in 40 CFR Part 63.1566(a)(5) [see section A.III.] of this section by submitting the operation,

maintenance, and monitoring plan to the City of Canton Health Department, Division of Air Pollution Control as part of the Notification of Compliance Status.

g. [63.1566(b)(9)]
The permittee shall submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 40 CFR Part 63.1574 [see section A.IV.].

h. [63.1566(c)(1)]
The permittee shall demonstrate continuous compliance with each emission limitation in Tables 15 and 16 [see section A.VI.] that applies to this emissions unit according to the methods specified in Tables 20 and 21 [see section A.VI.].

i. [63.1566(c)(2)]
The permittee shall demonstrate continuous compliance with the work practice standards in 40 CFR Part 63.1566(a)(3) [see section A.II.]of this section by complying with the procedures in your operation, maintenance, and monitoring plan.

3. [63.1567] DEMONSTRATING CONTINUOUS COMPLIANCE WITH THE INORGANIC HAP EMISSION LIMITATIONS AND WORK PRACTICE STANDARDS - 40 CFR Part 63, Subpart UUU

a. [63.1567(b)(2)]
The permittee must conduct each performance test for a catalytic reforming unit according to the requirements in 40 CFR Part 63.1571[see section A.V.] and the conditions specified in Table 25 [see section A.VI.].

b. [63.1567(b)(3)]
The permittee must establish each site-specific operating limit in Table 23 [see section A.VI.] that applies to this emissions unit according to the procedures in Table 25 [see section A.VI.].

c. [63.1567(b)(4)]
The permittee must demonstrate initial compliance with each applicable emission limitation that applies according to Table 26 [see section A.VI.].

d. [63.1567(b)(5)]
The permittee must demonstrate initial compliance with the work practice standard in 40 CFR Part 63.1567(a)(3) [see section A.III.] by submitting the operation, maintenance, and monitoring plan to the City of Canton Health Department, Division of Air Pollution Control as part of your Notification of Compliance Status.

e. [63.1567(b)(6)]
The permittee must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 40 CFR Part 63.1574 [see section A.IV.].

f. [63.1567(c)(1)]

The permittee must demonstrate continuous compliance with each emission limitation in Tables 22 and 23 [see section A.VI.] that applies to this emissions unit according to the methods specified in Tables 27 and 28 [see section A.VI.].

g. [63.1567(c)(2)]
The permittee must demonstrate continuous compliance with the work practice standard in 40 CFR Part 63.1567(a)(3) [see section A.II.] by maintaining records to document conformance with the procedures in the operation, maintenance and monitoring plan.

4. [63.1569(c)] DEMONSTRATING CONTINUOUS COMPLIANCE FOR HAP EMISSIONS FROM BYPASS LINES - 40 CFR Part 63, Subpart UUU
The permittee shall demonstrate initial compliance with the work practice standards for bypass lines as stated in the following:

a. [63.1569(b)(1)]
If the permittee elects the option in 40 CFR Part 63.1569(a)(1)(i) [see section A.I.2.], the permittee must conduct each performance test for a bypass line according to the requirements in 63.1571 [see section A.V.] and under the conditions specified in Table 37 [see section A.VI.].

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 City of Canton Health Department, Division of Air Pollution Control 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.].

e. [63.1569(c)(1)]
The permittee must demonstrate continuous compliance with each work practice standard in Table 36 [see section A.VI.] that applies according to the requirements in Table 39 [see section A.VI.].

f. [63.1569(c)(2)]
The permittee must demonstrate continuous compliance with the work practice standard in 40 CFR Part 63.1569(a)(2) [see section A.III.] 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. If the permittee is required to do a performance evaluation or test for a semi-regenerative catalytic reforming unit catalyst regenerator vent, the permittee may do them at the first regeneration cycle after April 11, 2005 and report the results in a followup Notification of Compliance Status report due no later than 150 days after the test.

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 City of Canton Health Department, Division of Air Pollution Control. 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 City of Canton Health Department, Division of Air Pollution Control.

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 City of Canton Health Department,

Division of Air Pollution Control, 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 (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 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 only by doing a new performance test.

VI. Miscellaneous Requirements

The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward.

1. The following tables from 40 CFR Part 63, Subpart UUU are attached:
Tables 15; 16; 17; 18 ; 19; 20; 21; 22; 23; 24; 25; 26; 27; 28; 36; 37; 38; 39; 41; 42; 43 and 44.

TABLE 15 TO Subpart UUU OF PART 63.—ORGANIC HAP EMISSION LIMITS FOR CATALYTIC REFORMING UNITS
[As stated in § 63.1566(a)(1), you must meet each emission limitation in the following table that applies to you]

For each new or existing catalytic reforming unit * * *	You must meet this emission limit for each process vent during depressuring and purging operation * * *
1. Option 1	Vent emissions to a flare that meets the requirements for control devices in § 63.11(b). Visible emissions from a flare must not exceed a total of 5 minutes during any 2-hour operating period.
2. Option 2	Using a control device, reduce uncontrolled emissions of total organic compounds (TOC) from your process vent by 98 percent by weight or to a concentration of 20 ppmv (dry basis), corrected to 3 percent oxygen, whichever is less stringent. If you vent emissions to a boiler or process heater to comply with the percent reduction or concentration emission limitation, the vent stream must be introduced into the flame zone, or any other location that will achieve the percent reduction or concentration standard.

TABLE 16 TO Subpart UUU OF PART 63.—OPERATING LIMITS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS

[As stated in § 63.1566(a)(2), you must meet each operating limit in the following table that applies to you]

For each new or existing catalytic reforming unit * * *	For this type of control device * * *	You must meet this operating limit during depressuring and purging operations * * *
1. Option 1: vent to flare	Flare that meets the requirements for control devices in § 63.11(b).	The flare pilot light must be present at all times and the flare must be operating at all times that emissions may be vented to it.
2. Option 2: percent reduction or concentration limit.	Thermal incinerator, boiler or process heater with a design heat input capacity under 44 MW, or boiler or process heater in which all vent streams are not introduced into the flame zone.	The daily average combustion zone temperature must not fall below the limit established during the performance test.

TABLE 17 TO Subpart UUU OF PART 63.—CONTINUOUS MONITORING SYSTEMS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS

[As stated in § 63.1566(b)(1), you must meet each requirement in the following table that applies to you]

For each new or exiting catalytic reforming unit * * *	If you use this type of control device * * *	You must install and operate this type of continuous monitoring system * * *
1. Option 1: vent to a flare	Flare that meets the requirements for control devices in § 63.11(b).	Monitoring device such as a thermocouple, an ultraviolet beam sensor, or infrared sensor to continuously detect the presence of a pilot flame.
2. Option 2: percent reduction or concentration limit.	Thermal incinerator, process heater or boiler with a design heat input capacity under 44 MW, or process heater or boiler in which all vent streams are not introduced into the flame zone.	Continuous parameter monitoring systems to measure and record the combustion zone temperature.

TABLE 18 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS

[As stated in § 63.1566(b)(2) and (3), you must meet each requirement in the following table that applies to you

For each new or exiting catalytic reforming unit * * *	You must * * *	Using * * *	According to these requirements * * *
1. Option 1: vent to a flare.	a. Conduct visible emission observations.	Method 22 (40 CFR Part 60, appendix A).	2-hour observation period. Record the presence of a flame at the pilot light over the full period of the test.
	b. Determine that the flare meets the requirements for net heating value of the gas being combusted and exit velocity.	Not applicable	40 CFR Part 60.11(b)(6) through (8).
2. Option 2: percent reduction or concentration limit.	a. Select sampling site	Method 1 or 1A (40 CFR Part 60, Appendix A). No traverse site selection method is needed for vents smaller than 0.10 meter in diameter.	Sampling sites must be located at the inlet (if you elect the emission reduction standard) and outlet of the control device and prior to any releases to the atmosphere.
	b. Measure gas volumetric flow rate.	Method 2, 2A, 2C, 2D, 2F, or 2G (40 CFR Part 60, Appendix A), as applicable.	

	c. Measure TOC concentration (for percent reduction standard).	Method 25 (40 CFR Part 60, Appendix A) to measure TOC concentration at the inlet and outlet of the control device. If the TOC outlet concentration is expected to be less than 50 ppm, you can use Method 25A to measure TOC concentration at the inlet and the outlet of the control device.	Take either an integrated sample or four grab samples during each run. If you use a grab sampling technique, take the samples at approximately equal intervals in time, such as 15-minute intervals during the run.
	d. Calculate TOC emission rate and mass emission reduction.	Calculate emission rate by Equation 1 of § 63.1566 (if you use Method 25) or Equation 2 of § 63.1566 (if you use Method 25A). Calculate mass emission reduction by Equation 3 of § 63.1566.	
	e. Measure TOC concentration (for concentration standard).	Method 25A (40 CFR Part 60, appendix A) to measure TOC concentration at the outlet of the control device.	
	f. Determine oxygen content in the gas stream at the outlet of the control device.	Method 3A or 3B (40 CFR part 60, Appendix A), as applicable.	
	g. Correct the measured TOC concentration for oxygen content.	Equation 4 of § 63.1566	
	h. Established each operating limit in Table 16 of this subpart that applies to you for a thermal incinerator, or process heater or boiler with a design heat input capacity under 44 MW, or process heater or boiler in which all vent streams are not introduced into the flame zone.	Data from the continuous parameter monitoring systems.	Collect the temperature monitoring data every 15 minutes during the entire period of the initial TOC performance test. Determine and record the minimum hourly average combustion zone temperature.

TABLE 19 TO Subpart UUU OF PART 63—INITIAL COMPLIANCE WITH ORGANIC HAP EMISSION LIMITS FOR CATALYTIC REFORMING UNITS

[As stated in § 63.1566(b)(7), you must meet each requirement in the following table that applies to you.]

For . . .	For the following emission limit ...	You have demonstrated initial compliance if . . .
1. Each new and existing catalytic reforming unit.	a. Visible emissions from a flare must not exceed a total of 5 minutes during any 2 consecutive hours.	Visible emissions, measured using Method 22 over the 2-hour observation period of the performance test do not exceed a total of 5 minutes.
	b. Reduce uncontrolled emissions of TOC from your process vent using a control device, by 98 percent by weight or to a concentration of 20 ppmv, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent.	The mass emission reduction measured using Method 25 over the period of the performance test, is at least 98 percent by weight. The mass emission reduction is calculated using Equations 1 (or 2) and 3 of § 63.1566 or the TOC concentration, measured by Method 25A over the period of the performance test, does not exceed 20 ppmv (dry basis), corrected to 3 percent oxygen using Equation 4 of § 63.1566.

TABLE 20 TO Subpart UUU OF PART 63.—CONTINUOUS COMPLIANCE WITH ORGANIC HAP EMISSION LIMITS FOR CATALYTIC REFORMING UNITS

[As stated in § 63.1566(c)(1), you must meet each requirement in the following table that applies to you]

For * * *	For this emission limit * * *	You must demonstrate continuous compliance during depressuring and purging by * * *
1. Option 1: Each new or existing catalytic reforming unit.	Vent emissions from your process vent to a flare that meets the requirements in § 63.11(b).	Maintaining visible emissions from a flare below a total of 5 minutes during any 2 consecutive hours.
2. Option 2: Each new or existing catalytic reforming unit.	Using a control device, reduce uncontrolled emissions of TOC from your process vent by 98 percent by weight or to a concentration of 20 ppmv, (dry basis), corrected to 3 percent oxygen, whichever is less stringent.	Maintaining a 98 percent by weight TOC emission reduction; or maintaining a TOC concentration of not more than 20 ppmv (dry basis), corrected to 3 percent oxygen, whichever is less stringent.

TABLE 20 TO Subpart UUU OF PART 63.—CONTINUOUS COMPLIANCE WITH ORGANIC HAP EMISSION LIMITS FOR CATALYTIC REFORMING UNITS

[As stated in § 63.1566(c)(1), you must meet each requirement in the following table that applies to you]

For * * *	For this emission limit * * *	You must demonstrate continuous compliance during depressuring and purging by * * *
1. Option 1: Each new or existing catalytic reforming unit.	Vent emissions from your process vent to a flare that meets the requirements in § 63.11(b).	Maintaining visible emissions from a flare below a total of 5 minutes during any consecutive hours.
2. Option 2: Each new or existing catalytic reforming unit.	Using a control device, reduce uncontrolled emissions of TOC from your process vent by 98 percent by weight or to a concentration of 20 ppmv, (dry basis), corrected to 3 percent oxygen, whichever is less stringent.	Maintaining a 98 percent by weight TOC emission reduction; or maintaining a TOC concentration of not more than 20 ppmv (dry basis), corrected to 3 percent oxygen, whichever is less stringent.

TABLE 21 TO Subpart UUU OF PART 63.—CONTINUOUS COMPLIANCE WITH OPERATING LIMITS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS

[As stated in § 63.1566(c)(1), you must meet each requirement in the following table that applies to you]

For * * *	If you use * * *	For this operating limit * * *	You must demonstrate continuous compliance during depressuring and purging by * * *
1. Each new or existing catalytic reforming unit.	a. Flare that meets the requirements in § 63.11(b).	The flare pilot light must present at all times and flare must be operating times that emissions may vented to it.	Collecting flare monitoring data according to § 63.1572; and recording for each 1-hour period whether the monitor was continuously operating and the pilot light was continuously present during each 1-hour period.
	b. Thermal incinerator, boiler or process heater with a design input capacity under 44 MW or boiler or process heater in which all vent streams are not introduced into the flame zone.	Maintain the daily average combustion zone temperature above the limit established during the performance test.	Collecting the hourly and daily temperature monitoring data according to § 63.1572; and maintaining the daily average combustion zone temperature

			above the limit established during the performance test.

TABLE 22 TO Subpart UUU OF PART 63—INORGANIC HAP EMISSION LIMITS FOR CATALYTIC REFORMING UNITS
[As stated in § 63.1567(a)(1), you must meet each emission limitation in the following table that applies to you]

For * * *	You must meet this emission limit for your process vent during coke burn-off and catalyst rejuvenation * * *
1. Each existing semi-regenerative catalytic reforming unit.	Reduce uncontrolled emissions of hydrogen chloride (HC1) by 92 percent by weight using a control device or to a concentration of 30 ppmv (dry basis), corrected to 3 percent oxygen.
2. Each existing cyclic or continuous catalytic reforming unit.	Reduce uncontrolled emissions of HC1 by 97 percent by weight using a control device or to a concentration of 10 ppmv (dry basis), corrected to 3 percent oxygen.
3. Each new semi-regenerative, cyclic, or continuous catalytic reforming unit.	Reduce uncontrolled emissions of HC1 by 97 percent by weight using a control device or to a concentration of 10 ppmv (dry basis), corrected to 3 percent oxygen.

TABLE 23 TO Subpart UUU OF PART 63.—OPERATING LIMITS FOR INORGANIC HAP EMISSION LIMITATIONS FOR CATALYTIC REFORMING UNITS
[As stated in § 63.1567(a)(2), you must meet each operating limit in the following table that applies to you]

For * * *	If you use this type of control device * * *	You must meet this operating limit during coke burn-off and catalytst rejuvenation . . .
1. Each new or existing catalytic reforming unit	a. Wet scrubber	The daily average pH of the water (or scrubbing liquid) exiting the scrubber must not fall below the limit established during the performance test; and the daily average liquid-to-gas ratio must not fall below the limit established during the performance test.
	b. Internal scrubbing system (i.e., no add-on control device).	The HCl concentration in the catalyst regenerator exhaust gas must not exceed the limit established during the performance test.

TABLE 24 TO Subpart UUU OF PART 63.—CONTINUOUS MONITORING SYSTEMS FOR INORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS
[As stated in § 63.1567(b)(1), you must meet each requirement in the following table that applies to you]

If you use this type of control device for your vent * * *	You must install and operate this type of continuous monitoring system * * *
1. Wet scrubber	Continuous parameter monitoring system to measure and record the pH of the water (or scrubbing liquid) exiting the scrubber during coke burn-off and catalyst rejuvenation. If applicable, you can use the alternative in § 63.1573 instead of a continuous parameter monitoring system for pH of the water (or scrubbing liquid); and continuous parameter monitoring systems to measure and record the gas flow rate to the scrubber and the total water (or scrubbing liquid) flow rate to the scrubber during coke burn-off and catalyst rejuvenation.
2. Internal scrubbing system (i.e., no addon control device).	Colormetric tube sampling system to measure the HCl concentration in the catalyst regenerator exhaust gas during coke burn-off and catalyst rejuvenation.

TABLE 25 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS FOR INORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS

[As stated in § 63.1567(b)(2) and (3), you must meet each requirement in the following table that applies to you]

If you use this type of control device or system * * *	You must * * *	Using * * *	According to these requirements * * *
1. Wet scrubber	a. Measure the HCl concentration at the outlet of the control device (for the concentration standard) or at the inlet and outlet of the control d4evice (for the percent reduction standard).	i. Method 26A (40 CFR Part 60, Appendix A).	(1) Sampling rate must be at least 0.014 dscm/min (0.5 dscf/ min). You must do the test during the coke burn-off and catalyst rejuvenation cycle, but don't make any test runs during the first hour or the last 6 hours of the cycle. (2) Record the total amount (rate) of scrubbing liquid or solution and the amount (rate) of makeup liquid to the scrubber during each test run.
	b. Establish operating limit for pH level.	.....	(1) Measure and record the pH of the water (or scrubbing liquid) exiting the scrubber every 15 minutes during the entire period of the performance test. Determineand record the hourly average pH level from the recorded values. (2) If you use the alternative method in § 63.1573, measure and record the pH of the water (or scrubbing liquid) exiting the scrubber during coke burn-off and catalyst rejuvenation using pH strips at least three times during each run. Determine and record the average pH level.
	c. Establish operating limit for liquid- to-gas ratio.	Data from the continuous parameter monitoring systems.	Measure and record the gas flow rate to the scrubber and the total water (or scrubbing liquid) flow rate to the scrubber every 15 minutes during the entire period of the performance test. Determine and record the hourly average gas flow rate and total water (or scrubbing liquid) flow rate. Determine and record the minimum liquid-to-gas ratio.
2. Internal scrubbing system (i.e., no add-on control device).	a. Measure the concentration of HCl in the catalyst regenerator exhaust gas.	Method 26 (40 CFR Part 60, Appendix A).	Sampling rate must be at least 0.014 dscm/min (0.5 dscf/min). You must do the test during the coke burn-off and catalyst rejuvenation cycle, but don't make any test runs during the first hour or the last 6 hours of the
	b. Establish operating limit for HCl concentration.	Measure and record the HCl concentration in the catalyst regenerator exhaust gas using the colorimetric tube sampling system at least three times during	

		each test run. Determine and record the average HCl concentration.	cycle.

TABLE 26 TO Subpart UUU OF PART 63.—INITIAL COMPLIANCE WITH INORGANIC HAP EMISSION LIMITS FOR CATALYTIC REFORMING UNITS

[As stated in § 63.1567(b)(4), you must meet each requirement in the following table that applies to you]

For* * *	For the following emission limit * * *	You have demonstrated initial compliance if * * *
1. Each existing semi-regenerative catalytic reforming unit.	Reduce uncontrolled emissions of HCl by 92 percent by weight using a control device or to a concentration of 30 ppmv, (dry basis), corrected to 3 percent oxygen.	Average emissions of HCl measured using Method 26 or 26A, as applicable over the period of the performance test, are reduced by 92 percent or to a concentration less than or equal to 30 ppmv (dry basis) corrected to 3 percent oxygen.
2. Each existing cyclic or continuous catalytic reforming unit and each new semi-regenerative, cyclic, or continuous catalytic reforming unit.	Reduce uncontrolled emissions of HCl by 97 percent by weight using a control device, or to a concentration of 10 ppmv (dry basis), corrected to 3 percent oxygen.	Average emissions of HCl measured using Method 26 or 26A, as applicable over the period of the performance test, are reduced by 97 percent or to a concentration less than or equal to 10 ppmv (dry basis) corrected to 3 percent oxygen.

TABLE 27 TO Subpart UUU OF PART 63.—CONTINUOUS COMPLIANCE WITH INORGANIC HAP EMISSION LIMITS FOR CATALYTIC REFORMING UNITS

[As stated in § 63.1567(c)(1), you must meet each requirement in the following table that applies to you]

For * * *	For this emission limit * * *	You must demonstrate continuous compliance during coke burn-off and catalyst rejuvenation by * * *
1. Each existing semi-regenerative catalytic reforming unit.	Reduce uncontrolled emissions of HCl by 92 percent by weight using a control device or to a concentration of 30 ppmv (dry basis), corrected to 3 percent oxygen.	Maintaining a 92 percent HCl emission reduction or an HCl concentration no more than 30 ppmv (dry basis), corrected to 3 percent oxygen.
2. Each existing cyclic or continuous catalytic reforming unit.	Reduce uncontrolled emissions of HCl by 97 percent by weight using a control device, or to a concentration of 10 ppmv (dry basis), corrected to 3 percent oxygen.	Maintaining a 97 percent HCl control efficiency or an HCl concentration no more than 10 ppmv (dry basis), corrected to 3 percent oxygen.
3. Each new semi-regenerative, cyclic, or continuous catalytic reforming unit.	Reduce uncontrolled emissions of HCl by 97 percent by weight using a control device, or to a concentration of 10 ppmv (dry basis), corrected to 3 percent oxygen.	Maintaining a 97 percent HCl control efficiency or an HCl concentration no more than 10 ppmv (dry basis), corrected to 3 percent oxygen.

TABLE 28 TO Subpart UUU OF PART 63.—CONTINUOUS COMPLIANCE WITH OPERATING LIMITS FOR INORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS

[As stated in § 63.1567(c)(1), you must meet each requirement in the following table that applies to you]

For * * *	For this operating limit * * *	If you use this type of control device * * *	You must demonstrate continuous compliance during coke burn-off and catalyst rejuvenation by * * *
1. Each new or existing catalytic reforming unit.	a. The daily average pH of the water (or scrubbing and liquid) exiting the scrubber must not fall below the level established during the performance test.	i. Wet scrubber	(1) Collecting the hourly and daily average pH monitoring data according to § 63.1572; and maintaining the daily average the pH above the operating limit established during the performance test. (2) If you use the alternative in § 63.1573, measuring and recording the pH of the water (or scrubbing liquid) exiting the scrubber every hour according to § 63.1572; determining and recording the daily average pH; and maintaining the daily average pH above the operating limit established during the performance test.
	b. The daily average liquid-to-gas ratio must not fall below the level established during the performance test.	Wet scrubber	Collecting the hourly average gas flow rate and total water (or scrubbing liquid) flow rate monitoring data; determining and recording the hourly average liquid-to-gas ratio; determining and recording the daily average liquid-to-gas ratio; and maintaining the daily average liquidto-

	c. The HCl concentration in the catalyst regenerator exhaust gas must not exceed the applicable operating limit established during the performance test.	Internal scrubbing system (e.g., no add-on control device).	gas ratio above the limit established during the performance test. Measuring and recording the concentration of HCl every 4 hours using a colormetric tube sampling system; and maintaining the HCl concentration below the applicable operating limit.

TABLE 36 TO Subpart UUU OF PART 63.—WORK PRACTICE STANDARDS FOR HAP EMISSIONS FROM BYPASS LINES

[As stated in § 63.1569(a)(1), you must meet each work practice standard in the following table that applies to you]

Option	You must meet one of these equipment standards * * *
1. Option 1	Install and operate a device (including a flow indicator, level recorder, or electronic valve position monitor) to continuously detect, at least every hour, whether flow is present in the bypass line. Install the device at or as near as practical to the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere.
2. Option 2	Install a car-seal or lock-and-key device placed on the mechanism by which the bypass device flow position is controlled (e.g., valve handle, damper level) when the bypass device is in the closed position such that the bypass line valve cannot be opened without breaking the seal or removing the device.
3. Option 3	
4. Option 4	Seal the bypass line by installing a solid blind between piping flanges. Vent the bypass line to a control device that meets the appropriate requirements in this subpart.

TABLE 37 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS FOR BYPASS LINES

[As stated in § 63.1569(b)(1), you must meet each requirement in the following table that applies to you]

For this standard . . .	You must . . .
1. Option 1: Install and operate a flow indicator, level recorder, or electronic valve position monitor.	Record during the performance test for each type of control device whether the flow indicator, level recorder, or electronic valve position monitor was operating and whether flow was detected at any time during each hour of level the three runs comprising the performance test.

TABLE 38 TO Subpart UUU OF PART 63.—INITIAL COMPLIANCE WITH WORK PRACTICE STANDARDS FOR HAP EMISSIONS FROM BYPASS LINES

[As stated in § 63.1569(b)(2), you must meet each requirement in the following table that applies to you]

For * * *	For this work practice standard * * *	You have demonstrated initial compliance if * * *
1. Each new or existing bypass line associated with a catalytic cracking unit, catalylic reforming unit, or sulfur recovery unit.	a. Option 1: Install and operate a device (including a flow indicator, level recorder, or electronic valve position monitor) to continuously detect, at least every hour, whether flow is present in the bypass line. Install the device at or as near as practical to the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere.	The installed equipment operates properly during each run of the performance test and no flow is present in the line during the test.

	b. Option 2: Install a car-seal or lock-and-key device placed on the mechanism by which the bypass device flow position is controlled (e.g., valve handle, damper level) when the bypass device is in the closed position such that the bypass line valve cannot be opened without breaking the seal or removing the device.	As part of the notification of compliance status, you certify that you installed the equipment, the equipment was operational by your compliance date, and you identify what equipment was installed.
	c. Option 3: Seal the bypass line by installing a solid blind between piping flanges.	See item 1.b. of this table.
	d. Option 4: Vent the bypass line to a control device that meets the appropriate requirements in this subpart.	See item 1.b. of this table.

TABLE 39 TO Subpart UUU OF PART 63.—CONTINUOUS COMPLIANCE WITH WORK PRACTICE STANDARDS FOR HAP EMISSIONS FROM BYPASS LINES

[As stated in § 63.1569(c)(1), you must meet each requirement in the following table that applies to you]

If you elect this standard * * *	You must demonstrate continuous compliance by * * *
1. Option 1: Flow indicator, level recorder, or electronic valve position monitor.	Continuously monitoring and recording whether flow is present in the bypass line; visually inspecting the device at least once every hour if the device is not equipped with a recording system that provides a continuous record; and recording whether the device is operating properly and whether flow is present in the bypass line.
2. Option 2: Car-seal or lock-and-key device	Visually inspecting the seal or closure mechanism at least once every month; and recording whether the bypass line valve is maintained in the closed position and whether flow is present in the line.
3. Option 3: Solid blind flange	Visually inspecting the blind at least once a month; and recording whether the blind is maintained in the correct position such that the vent stream cannot be diverted through the bypass line.
4. Option 4: Vent to control device	Monitoring the control device according to appropriate subpart requirements.
5. Option 1, 2, 3, or 4	Recording and reporting the time and duration of any bypass.

TABLE 41 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR INSTALLATION, OPERATION, AND MAINTENANCE OF CONTINUOUS PARAMETER MONITORING SYSTEMS—Continued

[As stated in § 63.1572(c)(1), you must meet each requirement in the following table that applies to you]

If you use a continuous parameter monitoring system to measure and record * * *	You must * * *
1. Voltage and secondary current or total power input.	At least monthly, inspect all components of the continuous parameter monitoring system for integrity and all electrical connections for continuity; and record the results of each inspection.
2. Pressure drop [1]	Locate the pressure sensor(s) in a position that provides a representative measurement of the pressure; minimize or eliminate pulsating pressure, vibration, and internal and external corrosion; use a gauge with an accuracy ± 2 percent over the operating range; check pressure tap for plugs at least once a week; using a manometer, check gauge calibration quarterly and transducer calibration monthly; for a semi-regenerative catalytic reforming unit, you can check the calibration quarterly and monthly or prior to regeneration, whichever is longer; record the results of each calibration; conduct calibration checks any time the sensor exceeds

	the manufacturer's specified maximum operating pressure range, or install a new pressure sensor; at least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage; and record the results of each inspection.
3. Air flow rate, gas flow rate, or total water (or scrubbing liquid) flow rate.	Locate the flow sensor(s) and other necessary equipment such as straightening vanes in a position that provides representative flow; use a flow rate sensor with an accuracy within ±5 percent; reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances; conduct a flow sensor calibration check at least semiannually; for a semi-regenerative catalytic reforming unit, you can check the calibration at least semiannually or prior to regeneration, whichever is longer; record the results of each calibration; if you elect to comply with Option 3 (Ni lb/hr) or Option 4 (Ni lb/1,000 lbs of coke burn-off) for the HAP metal emission limitations in § 63.1564, install the continuous parameter monitoring system for gas flow rate as close as practical to the continuous opacity monitoring system; and if you don't use a continuous opacity monitoring system, install the continuous parameter monitoring system for gas flow rate as close as practical to the control device.
4. Combustion zone temperature	Install the temperature sensor in the combustion zone or in the ductwork immediately downstream of the combustion zone before any substantial heat exchange occurs; locate the temperature sensor in a position that provides a representative temperature; use a temperature sensor with an accuracy of ±1 percent of the temperature being measured, expressed in degrees Celsius (C) or ±0.5 degrees C, whichever is greater; shield the temperature sensor system from electromagnetic interference and chemical contaminants; if you use a chart recorder, it must have a sensitivity in the minor division of at least 20 degrees Fahrenheit; perform an electronic calibration at least semiannually according to the procedures in the manufacturer's owners manual; following the electronic calibration, conduct a temperature sensor validation check, in which a second or redundant temperature sensor placed nearby the process temperature sensor must yield a reading within 16.7 degrees C of the process temperature sensor's reading; record the results of each calibration and validation check; conduct calibration and validation checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range, or install a new temperature sensor; and at least monthly, inspect all components for integrity and all electrical connections for continuity, oxidation, and galvanic corrosion.
5. pH	Locate the pH sensor in a position that provides a representative measurement of pH; ensure the sample is properly mixed and representative of the fluid to be measured; check the pH meter's calibration on at least two points every 8 hours of process operation; at least monthly, inspect all components for integrity and all electrical components for continuity; record the results of each inspection; and if you use pH strips to measure the pH of the water exiting a wet scrubber as an alternative to a continuous parameter monitoring system, you must use pH strips with an accuracy of ±10 percent.
6. HCl concentration	Use a colormetric tube sampling system with a printed numerical scale in ppmv, a standard measurement range of 1 to 10 ppmv (or 1 to 30 ppmv if applicable), and a standard deviation for measured values of no more than ±15 percent. System must include a gas detection pump and hot air probe if needed for the measurement range.

TABLE 42 TO Subpart UUU OF PART 63.—ADDITIONAL INFORMATION FOR INITIAL NOTIFICATION OF COMPLIANCE STATUS

[As stated in § 63.1574(d), you must meet each requirement in the following table that applies to you]

For * * *	You must provide this additional information * * *
1. Identification of affected emissions units and emission points.	Nature, size, design, method of operation, operating design capacity of each affected emissions unit; identify each emission point for each HAP; identify any affected emissions unit or vent associated with an affected emissions unit not subject to the requirements of Subpart UUU.
2. Initial compliance	Identification of each emission limitation you will meet for each affected emissions unit, including any option you select (i.e., NSPS, PM or Ni, flare, percent reduction, concentration, options for bypass lines); if applicable, certification that you have already conducted a performance test to demonstrate initial compliance with the NSPS for an affected emissions unit; certification that the vents meet the applicable emission limit and the continuous opacity or that the emission monitoring system meets the applicable performance specification; if applicable, certification that you have installed and verified the operational status of equipment by your compliance date for each bypass line that meets the requirements of Option 2, 3, or 4 in § 63.1569 and what equipment you installed; identification of the operating limit for each affected emissions unit, including supporting documentation; if your affected emissions unit is subject to the NSPS, certification of compliance with NSPS emission limitations and performance specifications; a brief description of performance test conditions (capacity, feed quality, catalyst, etc.); an engineering assessment (if applicable); and if applicable, the flare design (e.g., steam-assisted, air-assisted, or non-assisted), all visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the Method 22 test.
3. Continuous compliance	Each monitoring option you elect; and identification of any unit or vent for which monitoring is not required; and the definition of ‘‘operating day.’’ (This definition, subject to approval by the applicable permitting authority, must specify the times at which a 24-hr operating day begins and ends.)

TABLE 43 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR REPORTS

[As stated in § 63.1575(a), you must meet each requirement in the following table that applies to you]

You must submit a(n) * * *	The report must contain * * *	You must submit the report * * *
1. Compliance report	If there are not deviations from any emission limitation or work practice standard that applies to you, a statement that there were no deviations from the standards during the reporting period and that no continuous opacity monitoring system or continuous emission monitoring system was inoperative, inactive, out-of-control, repaired, or adjusted; and if you have a deviation from any emission limitation or work practice standard during the reporting period, the report must contain the information in § 63.1575(d) or (e)	Semiannually according to the requirements in § 63.1575(b).

Table 44 to Subpart UUU of Part 63 - Applicability of NESHAP General Provisions to Subpart UUU
As stated in §63.1577, you must meet each requirement in the following table that applies to you.

Citation	Subject	Applies to Subpart UUU	Explanation
§63.1	Applicability	Yes	Except that Subpart UUU specifies calendar or operating day.
§63.2	Definitions	Yes	
§63.3	Units and Abbreviations	Yes	
§63.4	Prohibited Activities	Yes	
§63.5(a)-(c)	Construction and Reconstruction	Yes	In §63.5(b)(4), replace the reference to §63.9 with §63.9(b)(4) and (5).
§63.5(d)(1)(i)	Application for Approval of Construction or Reconstruction - General Application Requirements	Yes	Except, Subpart UUU specifies the application is submitted as soon as practicable before startup but no later than 90 days (rather than 60) after the promulgation date where construction or reconstruction had commenced and initial startup had not occurred before promulgation.
§63.5(d)(1)(ii)		Yes	Except that emission estimates specified in §63.5(d)(1) (ii)(H) are not required.
§63.5(d)(1)(iii)		No	Subpart UUU specifies submission of notification of compliance status.
§63.5(d)(2)		No	
§63.5(d)(3)		Yes	Except that §63.5(d)(3)(ii) does not apply.
§63.5(d)(4)		Yes	

§63.5(e)	Approval of Construction or Reconstruction	Yes	
§63.5(f)(1)	Approval of Construction or Reconstruction Based on State Review	Yes	
§63.5(f)(2)		Yes	Except that 60 days is changed to 90 days and cross-reference to §63.9(b)(2) does not apply.
§63.6(a)	Compliance with Standards and Maintenance - Applicability	Yes	
§63.6(b)(1)-(4)	Compliance Dates for New and Reconstructed Emissions Units	Yes	
§63.6(b)(5)		Yes	Except that Subpart UUU specifies different compliance dates for emissions units.
§63.6(b)(6)	[Reserved]	Not appli-cable	
§63.6(b)(7)	Compliance Dates for New and Reconstructed Area Emissions Units That Become Major	Yes	
§63.6(c)(1)-(2)	Compliance Dates for Existing Emissions Units	Yes	Except that Subpart UUU specifies different compliance dates for emissions units subject to Tier II gasoline sulfur control requirements.
§63.6(c)(3)-(4)	[Reserved]	Not appli-cable	
§63.6(c)(5)	Compliance Dates for Existing Area Emissions Units That Become Major	Yes	

§63.6(d)	[Reserved]	Not applicable	
§63.6(e)(1)-(2)	Operation and Maintenance Requirements	Yes	
§63.6(e)(3)(i)-(iii)	Startup, Shutdown, and Malfunction Plan	Yes	
§63.6(e)(3)(iv)		Yes	Except that reports of actions not consistent with plan are not required within 2 and 7 days of action but rather must be included in next periodic report.
§63.6(e)(3)(v)-(viii)		Yes	The owner or operator is only required to keep the latest version of the plan.
§63.6(f)(1)-(2)(iii)(C)	Compliance with Emission Standards	Yes	
§63.6(f)(2)(iii)(D)		No	
§63.6(f)(2)(iv)-(v)		Yes	
§63.6(f)(3)		Yes	
§63.6(g)	Alternative Standard	Yes	
§63.6(h)	Opacity/VE Standards	Yes	
§63.6(h)(2)(i)	Determining Compliance with Opacity/VE Standards	No	Subpart UUU specifies methods.
§63.6(h)(2)(ii)	[Reserved]	Not applicable	
§63.6(h)(2)(iii)		Yes	
§63.6(h)(3)	[Reserved]	Not applicable	
§63.6(h)(4)	Notification of Opacity/VE Observation Date	Yes	Applies to Method 22 tests.

§63.6(h)(5)	Conducting Opacity/VE Observations	No	
§63.6(h)(6)	Records of Conditions During Opacity/VE Observations	Yes	Applies to Method 22 observations.
§63.6(h)(7)(i)	Report COM Monitoring Data from Performance Test	Yes	
§63.6(h)(7)(ii)	Using COM Instead of Method 9	No	
§63.6(h)(7)(iii)	Averaging Time for COM during Performance Test	Yes	
§63.6(h)(7)(iv)	COM Requirements	Yes	
§63.6(h)(8)	Determining Compliance with Opacity/VE Standards	Yes	
§63.6(h)(9)	Adjusted Opacity Standard	Yes	
§63.6(i)(1)-(14)	Extension of Compliance	Yes	Not applicable to an affected emissions unit with Tier II compliance date. May be applicable to an affected emissions unit exempt from Tier II rule.
§63.6(i)(15)	[Reserved]	Not appli-cable	
§63.6(i)(16)		Yes	
§63.6(j)	Presidential Compliance Exemption	Yes	
§63.7(a)(1)	Performance Test Requirements-Applicability	Yes	Except that Subpart UUU specifies the applicable test and demonstration procedures.

§63.7(a)(2)	Performance Test Dates	No	Test results must be submitted in the Notification of Compliance Status report due 150 days after the compliance date.
§63.7(a)(3)	Section 114 Authority	Yes	
§63.7(b)	Notifications	Yes	Except that Subpart UUU specifies notification at least 30 days prior to the scheduled test date rather than 60 days.
§63.7(c)	Quality Assurance Program/Site-Specific Test Plan	Yes	
§63.7(d)	Performance Test Facilities	Yes	
§63.7(e)	Conduct of Tests	Yes	
§63.7(f)	Alternative Test Method	Yes	
§63.7(g)	Data Analysis, Record Keeping, Reporting	Yes	Except performance test reports must be submitted with notification of compliance status due 150 days after the compliance date.
§63.7(h)	Waiver of Tests	Yes	
§63.8(a)(1)	Monitoring Requirements - Applicability	Yes	
§63.8(a)(2)	Performance Specifications	Yes	
§63.8(a)(3)	[Reserved]	Not appli-cable	
§63.8(a)(4)	Monitoring with Flares	Yes	
§63.8(b)(1)	Conduct of Monitoring	Yes	
§63.8(b)(2)-(3)	Multiple Effluents and Multiple Monitoring Systems	Yes	Subpart UUU specifies the required monitoring locations.

§63.8(c)(1)	Monitoring System Operation and Maintenance	Yes	
§63.8(c)(1)(i)-(ii)	Startup, Shutdown, and Malfunctions	Yes	Except that Subpart UUU specifies that reports are not required if actions are consistent with the SSM plan, unless requested by the permitting authority. If actions are not consistent, actions must be described in next compliance report.
§63.8(c)(1)(iii)	Compliance with Operation and Maintenance Requirements	Yes	
§63.8(c)(2)-(3)	Monitoring System Installation	Yes	Except that Subpart UUU specifies that for continuous parameter monitoring systems, operational status verification includes completion of manufacturer written specifications or installation operation, and calibration of the system or other written procedures that provide adequate assurance that the equipment will monitor accurately.
§63.8(c)(4)	Continuous Monitoring System Requirements	No	Subpart UUU specifies operational requirements.
§63.8(c)(4)(i)-(ii)	Continuous Monitoring System Requirements	Yes	Except that these requirements apply only to a continuous opacity monitoring system or a continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or SO_2 limits.

§63.8(c)(5)	COM Minimum Procedures	Yes	
§63.8(c)(6)	CMS Requirements	No	Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or SO_2 limits.
§63.8(c)(7)-(8)	CMS Requirements	Yes	
§63.8(d)	Quality Control Program	Yes	Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or SO_2 limits.
§63.8(e)	CMS Performance Evaluation	Yes	Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or SO_2 limits. Results are to be submitted as part of the Notification of Compliance Status due 150 days after the compliance date.
§63.8(f)(1)-(5)	Alternative Monitoring Method	Yes	Except that Subpart UUU specifies procedures for requesting alternative monitoring systems and alternative parameters.

§63.8(f)(6)	Alternative to Relative Accuracy Test	Yes	Applicable to continuous emission monitoring systems if performance specification requires a relative accuracy test audit.
§63.8(g)(1)-(4)	Reduction of Monitoring Data	Yes	Applies to a continuous opacity monitoring system or continuous emission monitoring system.
§63.8(g)(5)	Data Reduction	No	Subpart UUU specifies requirements.
§63.9(a)	Notification Requirements - Applicability	Yes	Duplicate Notification of Compliance Status report to the Regional Administrator may be required.
§63.9(b)(1)-(5)	Initial Notifications	Yes	Except that notification of construction or reconstruction is to be submitted as soon as practicable before startup but no later than 30 days (rather than 60 days) after the effective date if construction or reconstruction had commenced but startup had not occurred before the effective date.
§63.9(c)	Request for Extension of Compliance	Yes	
§63.9(d)	New Emissions Unit Notification for Special Compliance Requirements	Yes	
§63.9(e)	Notification of Performance Test	Yes	Except that notification is required at least 30 days before test.
§63.9(f)	Notification of VE/Opacity Test	Yes	

§63.9(g)	Additional Notification Requirements for Emissions Units with Continuous Monitoring Systems	Yes	Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or SO_2 limits.
§63.9(h)	Notification of Compliance Status	Yes	Except that Subpart UUU specifies the notification is due no later than 150 days after compliance date.
§63.9(i)	Adjustment of Deadlines	Yes	
§63.9(j)	Change in Previous Information	Yes	
§63.10(a)	Record Keeping and Reporting-Applicability	Yes	
§63.10(b)	Records	Yes	Except that §63.10(b)(2)(xiii) applies if you use a continuous emission monitoring system to meet the NSPS or you elect to meet the NSPS, CO, or SO_2 reduced sulfur limit and the performance evaluation requires a relative accuracy test audit.
§63.10(c)(1)-(6), (9)-(15)	Additional Records for Continuous Monitoring Systems	Yes	Except that these requirements apply if you use a continuous opacity monitoring system or a continuous emission monitoring system to meet the NSPS or elect to meet the NSPS opacity, CO, or SO_2 limits.

§63.10(c)(7)-(8)	Records of Excess Emissions and Exceedances	No	Subpart UUU specifies requirements.
§63.10(d)(1)	General Reporting Requirements	Yes	
§63.10(d)(2)	Performance Test Results	No	Subpart UUU requires performance test results to be reported as part of the Notification of Compliance Status due 150 days after the compliance date.
§63.10(d)(3)	Opacity or VE Observations	Yes	
§63.10(d)(4)	Progress Reports	Yes	
§63.10(d)(5)(i)	Startup, Shutdown, and Malfunction Reports	Yes	Except that reports are not required if actions are consistent with the SSM plan, unless requested by permitting authority.
§63.10(d)(5)(ii)		Yes	Except that actions taken during a startup, shut-down, or malfunction that are not consistent with the plan do not need to be reported within 2 and 7 days of commencing and completing the action, respectively, but must be included in the next periodic report.

§63.10(e)(1)-(2)	Additional CMS Reports	Yes	Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or SO_2 limits. Reports of performance evaluations must be submitted in Notification of Compliance Status.
§63.10(e)(3)	Excess Emissions/CMS Performance Reports	No	Subpart UUU specifies the applicable requirements.
§63.10(e)(4)	COMS Data Reports	Yes	
§63.10(f)	Record Keeping/ Reporting Waiver	Yes	
§63.11	Control Device Requirements	Yes	Applicable to flares.
§63.13	Addresses	Yes	
§63.14	Incorporation by Reference	Yes	
§63.15	Availability of Information	Yes	

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Emissions Unit ID: P011

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit consists of a Claus Sulfur Recovery Unit (SRU) in series with a SCOT unit, which is used to convert sulfur dioxide (SO2) to hydrogen sulfide (H2S) for further processing in the SRU. Acid gases from refinery processes are processed in the SRU to recover the sulfur. The SRU generates some SO2 which is treated in the same SCOT unit. The SCOT unit converts the SO2 from the SRU into H2S which is recycled back to the SRU. Both SRU's that are part of emissions units P011 and P016 discharge to either SCOT 1 or SCOT 2 unit which, in turn, vents to a thermal oxidizer for conversion of the residual H2S to SO2 prior to discharge into the ambient air. The thermal oxidizer is rated at 21 mmBtu/hr and burns only natural gas for fuel.	40 CFR Part 60, Subpart J	250 ppm of SO2 as a rolling, 12-hour average
	OAC rule 3745-31-05(A)(3) (PTI 15-0649)	21.1 lbs/hr of SO2 37.9 tpy of SO2 The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart J.
	40 CFR 52.1881(b)(27)(ix)(D)	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 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 63.1568(a)	See section A.I.2.c.
	40 CFR Part 63.1577	See section A.I.2.d.
	40 CFR Part 63.1569(a)	See section A.I.2.e.

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 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.d 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.e [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.f [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.].

2.g The permittee shall implement the enhancements to the program as outlined in Paragraph 21 of the global settlement agreement dated August 28, 2001 between Marathon Ashland Petroleum, LLC (MAP) and the United States of America(Civil NO. 01-40119). Although the enhancements will terminate on December 31, 2008, MAP obtained release from civil liabilities associated with 40 CFR Part 60, Subparts A&J for projects and activities conducted prior to May 11, 2001.

II. Operational Restrictions

1. The permittee shall operate and maintain a flare system, in accordance with 40 CFR Part 63.11(b), for use during emergency or upset conditions experienced during the operation of the SRU.

2. 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.

3. [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 Record Keeping Requirements

1. The permittee shall continuously monitor and record SO2 and O2 emissions from emissions units P011 and P016. The permittee shall operate and maintain the existing monitoring and recording equipment to demonstrate compliance with the applicable standards. Monitoring data of SO2 emissions shall be expressed on a dry, oxygen-free basis. The continuous monitoring and recording equipment shall be operated and maintained in accordance with the requirements specified in 40 CFR Part 60.13.

2. The permittee shall maintain a statement of certification of the existing continuous SO2 and O2 monitoring systems on site. The certification 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 City of Canton Health Department, Division of Air Pollution Control upon request. The span values for this monitor are 500 ppm of SO2 and 10 percent O2. Methods 6 and 3 shall be used for conducting the relative accuracy evaluations.

3. The permittee shall maintain records of all data obtained by the continuous SO2 and O2 monitoring systems including, but not limited to, parts per million SO2 and O2, emissions of SO2 in units of the applicable standards in the appropriate averaging period (i.e., in ppm as a rolling, 12-hour average and in lbs/hr), results of daily zero/span calibration checks, and the magnitudes of manual calibration adjustments. The continuous monitoring and recording equipment shall be in continuous operation except for system breakdowns, repairs, calibration checks, and zero and span adjustments.

4. The permittee shall operate and maintain, in accordance with manufacturer's recommendations, flow measuring devices to quantify the emissions routed from the SRU to either emissions unit

P003 or P004 (flares). Data collection shall commence with the activation of the relief valve and continue until the release has ceased. The type and specifications of flow measuring devices shall be subject to approval by the Canton City Health Department, Air Pollution Control Division upon request.

5. The permittee shall install, operate, and maintain an alarm system on the SRU which will immediately notify plant operators when a hydrogen sulfide venting situation develops. The alarm shall notify plant personnel that H2S is being vented to the flare. When an H2S venting event occurs, plant personnel shall notify the shift supervisor. Shift supervisors (or other plant personnel) shall take immediate action to eliminate the venting of H2S. The type and specifications of H2S alarm systems shall be subject to approval by the Canton City Health Department, Air Pollution Control Division upon request and shall be operated and maintained in accordance with the manufacturer's recommendations.

6. The permittee shall maintain daily records of the hours during which emissions units P011 and P016 operate simultaneously and the total number of operating hours for the SRU system.

7. Within 180 days of the effective date of this permit, the permittee shall develop or have developed 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 log of the records for the monitoring system dedicated to the continuous SO2 monitoring system must be kept on site and available for inspection during regular office hours.

8. 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(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.

9. [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 SO_2 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.

10. [63.1573] MONITORING ALTERNATIVES - 40 CFR Part 63, Subpart UUU

a. [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 a.i. through a.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.

b. [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).

c. [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 c.i. through c.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.

11. [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. 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 Canton City Health Department, Air Pollution Control Division 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 limits (250 ppm and 21.1 lbs/hr). These reports shall also contain the total SO2 emissions for the calendar quarter (in tons). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

2. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Canton City Health Department, Air Pollution Control Division 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's operating time during the reporting period and the date, time, reason, and corrective actions 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.

3. The permittee shall notify the Canton City Health Department, Air Pollution Control Division as soon as possible of any H2S venting to the flare from this emissions unit during normal business hours. Hydrogen sulfide venting at all other times shall be reported to the Canton City Health Department, Air Pollution Control Division at the first opportunity during normal business hours. If the venting of H2S poses a health risk, the shift supervisor (or other plant personnel) on duty shall report the venting to the Ohio EPA emergency response division.

4. The permittee shall report any flow measurement data accumulated during the quarter from the flow measuring device used to quantify emissions routed from the SRU to the north flare (P003).

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.

5. [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 City of Canton Health Department, Division of Air Pollution Control 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 City of Canton Health Department, Division of Air Pollution Control 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 limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

250 ppmv of SO2 as a rolling, 12-hour average
21.1 lbs/hr of SO2 (while operating emissions units P011 and P016 simultaneously)

Applicable Compliance Method:

Compliance shall be demonstrated based upon the use of the SO2 continuous emission monitoring system (CEMS) as specified in section A.III.

If required, compliance shall also be demonstrated based upon the emission testing methods and procedures specified in section A.V.2.

b. Emission Limitation:

37.9 tpy of SO2

Applicable Compliance Method:

Compliance shall be demonstrated by summing the SO2 emission rate, in lbs/hr, from the CEMS for each hour of operation during the year, and then divide the total annual pounds of SO2 by 2000 lbs/ton.

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 the permit and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable hourly mass emission rates for SO2.

c. 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6 shall be employed to demonstrate compliance with the allowable mass emission rates for SO2. Alternative USEPA-approved test methods may be used with prior approval from the Canton City Health Department, Air Pollution Control Division.

d. The tests shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the Canton City Health Department, Air Pollution Control Division.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an “Intent to Test” notification to the Canton City Health Department, Air Pollution Control Division. The “Intent to Test” notification shall describe in detail the proposed test methods and procedures, the emissions unit’s operating parameters, the time(s) and dates of the tests and the persons who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the Canton City Health Department, Air Pollution Control Division’s refusal to accept the results of the emission test.

Personnel from the Canton City Health Department, Air Pollution Control Division shall be permitted to witness the tests, 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 shall be signed by the person or persons responsible for the tests and submitted to the Canton City Health Department, Air Pollution Control Division within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Canton City Health Department, Air Pollution Control Division.

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.

[63.1568] 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)

$$C_{\mathbf{adj}} = C_{\mathbf{meas}} \, [20.9_c/(20.9 - \%O_2)]$$

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;
20.9_c = 20.9 percent oxygen—0.0 percent oxygen (defined oxygen correction basis), percent;
20.9 = oxygen concentration in air, percent;
$\%O_2$ = oxygen concentration measured on a dry basis, percent.

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 City of Canton Health Department, Division of Air Pollution Control 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.

4. [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 City of Canton Health Department, Division of Air Pollution Control 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.].

5. [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.

6. [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 City of Canton Health Department, Division of Air Pollution Control. 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 City of Canton Health Department, Division of Air Pollution Control.

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 City of Canton Health Department, Division of Air Pollution Control, 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. The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward. The following tables from 40 CFR Part 63, Subpart UUU are attached: Tables 29; 30; 31; 32; 33; 34; 35; 36; 37; 38; 39; 40; 41; 42; 43 and 44.

TABLE 29 TO Subpart UUU OF PART 63.—HAP EMISSION LIMITS FOR SULFUR RECOVERY UNITS
[As stated in § 63.1568(a)(1), you must meet each emission limitation in the following table that applies to you]

For * * *	You must meet this emission limit for each process vent * * *

1. Each new or existing Claus sulfur recovery unit part of a sulfur recovery plant of 20 long tons per day or more and subject to the NSPS for sulfur oxides in 40 CFR Part 60.104(a)(2).	a. 250 ppmv (dry basis) of SO_2 (SO_2) at zero percent excess air if you use an oxidation or reduction control system followed by incineration. b. 300 ppmv of reduced sulfur compounds calculated as ppmv SO_2 (dry basis) at zero percent excess air if you use a reduction control system without incineration.
2. Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2): Option 1 (Elect NSPS).	a. 250 ppmv (dry basis) of SO_2 at zero percent excess air if you use an oxidation or reduction control system followed by incineration. b. 300 ppmv of reduced sulfur compounds calculated as ppmv SO_2 (dry basis) at zero percent excess air if you use a reduction control system without incineration.
3. Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in paragraph (a)(2) of 40 CFR Part 60.104: Option 2 (TRS limit).	300 ppmv of total reduced sulfur (TRS) compounds, expressed as an equivalent SO_2 concentration (dry basis) at zero percent oxygen.

TABLE 30 TO Subpart UUU OF PART 63.—OPERATING LIMITS FOR HAP EMISSIONS FROM SULFUR RECOVERY UNITS

[As stated in § 63.1568(a)(2), you must meet each operating limit in the following table that applies to you]

For * * *	If use this type of control device	You must meet this operating limit* * *
1. Each new or existing Claus sulfur recovery unit part of a sulfur recovery plant of 20 long tons per day or more and subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2).	Not applicable	Not applicable.
2. Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2): Option 1 (Elect NSPS).	Not applicable	Not applicable.
3. Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2): Option 2 (TRS limit).	Thermal incinerator	Maintain the daily average combustion zone temperature above the limit established during the performance test; and maintain the daily average oxygen concentration in the vent stream (percent, dry basis) above the limit established during the performance test.

TABLE 31 TO Subpart UUU OF PART 63.—CONTINUOUS MONITORING SYSTEMS FOR HAP EMISSIONS FROM SULFUR RECOVERY UNITS

[As stated in § 63.1568(b)(1), you must meet each requirement in the following table that applies to you]

For * * *	For this limit * * *	You must install and operate this continuous monitoring system * * *
1. Each new or existing Claus sulfur recovery unit part to a sulfur recovery plant of 20 long tons per day and subject to the NSPS for sulfur oxides in 40 CFR Part 60.104 (1) (2).	a. 250 ppmv (dry basis) of SO_2 at zero percent excess air if you use an oxidation or reduction control system followed by incineration.	Continuous emission monitoring system to measure and record the hourly average concentration of SO_2 (dry basis) at zero percent excess air for each exhaust stack. This system must include an oxygen monitor for correcting the data for excess air.
	b. 300 ppmv of reduced sulfur compounds calculated as ppmv SO_2 (dry basis) at zero percent excess air if you use a reduction	Continuous emission monitoring system to measure and record the hourly average concentration of reduced sulfur and oxygen

	control system without incineration.	(O_2) emissions. Calculate the reduced sulfur emissions as SO_2 (dry basis) at zero percent excess air. *Exception:* You can use an instrument having an air or SO_2 dilution and oxidation system to convert the reduced sulfur to SO_2 for continuously monitoring and recording the concentration (dry basis) at zero percent excess air of the resultant SO_2 instead of the reduced sulfur monitor. The monitor must include an oxygen monitor for correcting the data for excess oxygen.
2. Option 1: Elect NSPS. Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in paragraph (a) (2) of 40 CFR 60.104.	a. 250 ppmv (dry basis) of SO_2 at zero percent excess air if you use an oxidation or reduction control system followed by incineration.	Continuous emission monitoring system to measure and record the hourly average concentration of SO_2 (dry basis), at zero percent excess air for each exhaust stack. This system must include an oxygen monitor for correcting the data for excess air.
	b. 300 ppmv of reduced sulfur compounds calculated as ppmv SO_2 (dry basis) at zero percent excess air if you use a reduction control system without incineration.	Continuous emission monitoring system to measure and record the hourly average concentration of reduced sulfur and O_2 emissions for each exhaust stack. Calculate the reduced sulfur emissions as SO_2 (dry basis), at zero percent excess air. *Exception:* You can use an instrument having an air or O_2 dilution and oxidation system to convert the reduced sulfur to SO_2 for continuously monitoring and recording the concentration (dry basis) at zero percent excess air of the resultant SO_2 instead of the reduced sulfur monitor. The monitor must include an oxygen monitor for correcting the data for excess oxygen.
3. Option 2: TRS limit Each new or existing sulfur recovery unit (Claus or Other type, regardless or size) not subject to the NSPS for sulfur oxides in 40 CFR Part 60.104 (a) (2).	300 ppmv of total reduced sulfur (TRS) compounds, expressed as an equivalent SO_2 concentration (dry basis) at zero percent oxygen.	Continuous emission monitoring system to measure and record the hourly average concentration of TRS for each exhaust stack. This monitor must include an oxygen monitor for correcting the data for excess oxygen; or continuous parameter monitoring systems to measure and record the combustion zone temperature of each thermal incinerator and the oxygen content (percent, dry basis) in the vent stream of the incinerator.

TABLE 32 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS FOR HAP EMISSIONS FROM SULFUR RECOVERY UNITS NOT SUBJECT TO THE NEW Emissions unit PERFORMANCE STANDARDS FOR SULFUR OXIDES

[As stated in § 63.1568(b)(2) and (3), you must meet each requirement in the following table that applies to you]

For * * *	You must * * *	Using * * *	According to these requirements * * *
1. Each new and existing sulfur recovery unit: Option 1 (Elect NSPS).	Measure SO_2 concentration (for an oxidation or reduction system followed by incineration) or the concentration of reduced sulfur (or SO_2 if you use an instrument to convert the reduced sulfur to SO_2) for a reduction control system without incineration.	Data from continuous emission monitoring system.	Collect SO_2 monitoring data every 15 minutes for 24 consecutive operating hours. Reduce the data to 1-hour averages computed from four or more data points equally spaced over each 1-hour period.

2. Each new and existing sulfur recovery unit: Option 2 (TRS limit).	a. Select sampling port's location and the number of traverse ports.	Method 1 or 1A Appendix A to part 60 of this chapter.	Sampling sites must be located at the outlet of the control device and prior to any releases to the atmosphere.
	b. Determine velocity and volumetric flow rate.	Method 2, 2A, 2C, 2D, 2F, or 2G in Appendix A to part 60 of this chapter, as applicable.	
	c. Conduct gas molecular weight analysis; obtain the oxygen concentration needed to correct the emission rate for excess air.	Method 3, 3A, or 3B in appendix A to part 60 of this chapter, as applicable.	Take the samples simultaneously with reduced sulfur or moisture samples.
	d. Measure moisture content of the stack gas.	Method 4 in Appendix A to part 60 of this chapter.	Make your sampling time for each Method 4 sample equal to that for 4 Method 15 samples.
	e. Measure the concentration of TRS.	Method 15 or 15A in Appendix A to part 60 of this chapter, as applicable.	If the cross-sectional area of the duct is less than 5 square meters (m^2) or 54 square feet, you must use the centroid of the cross section as the sampling point. If the cross-sectional area is 5 m^2 or more and the centroid is more than 1 meter (m) from the wall, your sampling point may be at a point no closer to the walls than 1 m or 39 inches. Your sampling rate must be at least 3 liters per minute or 0.10 cubic feet per minute to ensure minimum residence time for the sample inside the sample lines.
	f. Calculate the SO_2 equivalent for each run after correcting for moisture and oxygen.	The arithmetic average of the SO2 equivalent for each sample during the run.	
	g. Correct the reduced sulfur samples to zero percent excess air.	Equation 1 of § 63.1568.	
	h. Establish each operating limit in Table 30 of this subpart that applies to you.	Data from the continuous parameter monitoring system.	

(Continued on next page)

(Cont.) TABLE 32 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS FOR HAP EMISSIONS FROM SULFUR RECOVERY UNITS NOT SUBJECT TO THE NEW Emissions unit PERFORMANCE STANDARDS FOR SULFUR OXIDES

[As stated in § 63.1568(b)(2) and (3), you must meet each requirement in the following table that applies to you]

For * * *	You must * * *	Using * * *	According to these requirements * * *

	i. Measure thermal incinerator: combustion zone temperature.	Data from the continuous parameter monitoring system.	Collect temperature monitoring data every 15 minutes during the entire period of the performance test; and determine and record the minimum hourly average temperature from all the readings.
	j. Measure thermal incinerator: oxygen concentration (percent, dry basis) in the vent stream.	Data from the continuous parameter monitoring system.	Collect oxygen concentration (percent, dry basis) data every 15 minutes during the entire period of the performance test; and determine and record the minimum hourly average percent excess oxygen concentration.
	k. If you use a continuous emission monitoring system, measure TRS concentration.	Data from continuous emission monitoring system.	Collect TRS data every 15 minutes for 24 consecutive operating hours. Reduce the data to 1-hour averages computed from four or more data points equally spaced over each 1-hour period.

TABLE 33 TO Subpart UUU OF PART 63.—INITIAL COMPLIANCE WITH HAP EMISSION LIMITS FOR SULFUR RECOVERY UNITS

[As stated in § 63.1568(b)(5), you must meet each requirement in the following table that applies to you]

For * * *	For the following emission limit * * *	You have demonstrated initial compliance if * * *
1. Each new or existing Clause sulfur recovery unit part of a sulfur recovery plant of 20 long tons per day and subject to the NSPS for sulfur oxides in 40 CFR Part 60.104(a)(2).	a. 250 ppmv (dry basis) SO2 at zero percent excess air if you use an oxidation or reduction control system followed by incineration.	You have already conducted a performance test to demonstrate initial compliance with the NSPS and the hourly average SO2 emissions measured by the continuous emission monitoring system are less than or equal to 250 ppmv (dry basis) at zero percent excess air. As part of the Notification of Compliance Status, you must certify that your vent meets the SO2 limit. You are not required to do another performance test to demonstrate initial compliance. You have already conducted a performance evaluation to demonstrate initial compliance with the applicable performance specification. As part of your Notification of Compliance Status, you must certify that your continuous emission monitoring system meets the applicable requirements in § 63.1572. You are not required to do another performance evaluation to demonstrate initial compliance.
	b. 300 ppmv of reduced sulfur compounds calculated as ppmv SO2 (dry basis) at zero percent excess air if you use a reduction control system without incineration.	You have already conducted a performance test to demonstrate initial compliance with the NSPS and the hourly average SO2 emissions measured by your continuous emission monitoring system are less than or equal to 250 ppmv (dry basis) at zero percent excess air. As part of the Notification of Compliance Status, you must certify that your vent meets the SO2 limit. You are not required to do another performance test do demonstrate initial compliance.

2. Option 1: Elect NSPS. Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR Part 60.104(a)(2).	a. 250 ppmv (dry basis) of SO2 at zero percent excess air if you use an oxidation control system followed by incineration.	You have already conducted a performance evaluation to demonstrate initial compliance with the applicable performance specification. As part of your Notification of Compliance Status, you must certify that your continuous emission monitoring system meets the applicable requirements in § 63.1572. You are not required to do another performance evaluation to demonstrate initial compliance. The hourly average SO2 emissions measured by the continuous emission monitoring system over the 24-hour period of the initial performance test are not more than 250 ppvm (dry basis) at zero percent excess air; and your performance evaluation shows the monitoring system meets the applicable requirements in § 63.1572.
	b. 300 ppmv of reduced sulfur compounds calculated as ppmv SO2 (dry basis) at zero percent excess air if you use a reduction control system without incineration.	The hourly average reduced sulfur emissions measured by the continuous emission monitoring system over the 24-hour period of the performance test no more than 300 ppmv, calculated as ppmv SO2 (dry basis) at zero percent excess air; and your performance evaluation shows the continuous emission monitoring system meets the applicable requirements in § 63.1572.

(Continued on next page)

(Cont.) TABLE 33 TO Subpart UUU OF PART 63.—INITIAL COMPLIANCE WITH HAP EMISSION LIMITS FOR SULFUR RECOVERY UNITS

[As stated in § 63.1568(b)(5), you must meet each requirement in the following table that applies to you]

For * * *	For the following emission limit * * *	You have demonstrated initial compliance if * * *
3. Option 2: TRS limit. Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR Part 60.104(a)(2).	300 ppmv of TRS compounds expressed as an equivalent SO_2 concentration (dry basis) at zero percent oxygen.	If you do not use a continuous emission monitoring system, the average TRS emissions measured using Method 15 over the period of the initial performance test are less than or equal to 300 ppmv expressed as equivalent SO2 concentration (dry basis) at zero percent oxygen. If you use a continuous emission monitoring system the hourly average TRS emissions measured by the continuous emission monitoring system over the 24-hour period of the performance test are no more than 300 ppmv expressed as an equivalent SO_2 concentration (dry basis) at zero percent oxygen; and your performance evaluation shows the continuous emission monitoring system meets the applicable requirements in § 63.1572.

TABLE 34 TO Subpart UUU OF PART 63.—CONTINUOUS COMPLIANCE WITH HAP EMISSION LIMITS FOR SULFUR RECOVERY UNITS

[As stated in § 63.1568(c)(1), you must meet each requirement in the following table that applies to you.]

For * * *	For this emission limit * * *	You must demonstrate continuous compliance by * * *

1. Each new or existing Claus sulfur recovery unit part of a sulfur recovery plant of 20 long tons per or more and subject to the NSPS for sulfur oxides in 40 CFR Part 60.104(a)(2).	a. 250 ppmv (dry basis) SO2 at zero percent excess air if you use an oxidation or reduction control system followed by incineration.	Collecting the hourly average SO2 monitoring data (dry basis, percent excess air) according to § 63.1572; maintaining the hourly average SO2 concentration at or below the applicable limit; determining and recording each 12-hour average SO2 day concentration; and reporting any 12-hour average SO2 concentration greater than the applicable emission limitation in the compliance report required in § 63.1575.
	b. 300 ppmv of reduced sulfur compounds calculated as ppmv (dry basis) SO2 at zero percent excess air if you use a reduction control system without incineration.	Collecting the hourly average reduced sulfur and O2 data according to § 63.1572; and maintaining the hourly average concentration of reduced sulfur at or below the applicable limit; and determining and recording each 12-hour average concentration of reduced sulfur; and reporting any 12-hour average concentration of reduced sulfur greater than the applicable emission limitation in the compliance report required in § 63.1575.
2. Option 1: Elect NSPS Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR Part 60.104(a)(2).	a. 250 ppmv (dry basis) of SO2 at zero percent excess air (for oxidation or reduction system followed by incineration).	Collecting the hourly average SO2 monitoring data (dry basis, percent excess air) according to § 63.1572; maintaining the hourly average SO2 concentration at or below the applicable limit; determining and recording each 12-hour average SO2 concentration; and reporting any 12-hour average SO2 concentration greater than the applicable emission limitation in the compliance report required in § 63.1575.
	b. 300 ppmv of reduced sulfur compounds calculated as ppmv SO2 (dry basis) at zero percent excess air (for reduction control system without incineration).	Collecting the hourly average reduced sulfur (and air or O2 dilution and oxidation data) according to § 63.1572; maintaining the hourly average SO2 concentration at or below the applicable limit; reducing the monitoring data to 12-hour averages; and reporting any 12-hour average SO2 concentration greater than the applicable limit in the compliance report required by § 63.1575.
3. Option 2: TRS limit Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR Part 60.104(a)(2).	300 ppmv of TRS compounds, expressed as an SO2 concentration (dry basis) at zero percent oxygen or reduced sulfur compounds calculated as ppmv SO2 (dry basis) at zero percent excess air.	Collecting the hourly average TRS monitoring data according to § 63.1572, if you use a continuous emission monitoring system; maintaining the hourly average concentration of TRS at or below the applicable limit; reducing the TRS monitoring data to 12-hour averages; reporting any 12-hour average TRS greater than the applicable limit in the compliance report required by § 63.1575; and maintaining the hourly average concentration of TRS below the applicable limit if you use continuous parameter monitoring systems.

TABLE 35 TO Subpart UUU OF PART 63.—CONTINUOUS COMPLIANCE WITH OPERATING LIMITS FOR HAP EMISSIONS FROM SULFUR RECOVERY UNITS

[As stated in § 63.1568(c)(1), you must meet each requirement in the following table that applies to you]

For * * *	For this operating limit * * *	You must demonstrate continuous compliance by * * *
1. Each new or existing Claus sulfur recovery unit part of a sulfur recovery plant of 20 long tons per day or more and subject to the NSPS for sulfur oxides in paragraph 40 CFR 60.104(a)(2).	Not applicable	Meeting the requirements of Table 34 of this subpart.
2. Option 1: Elect NSPS Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR Part 60.104(a)(2).	Not applicable	Meeting the requirements of Table 34 of this subpart.
3. Option 2: TRS limit Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR Part 60.104(a)(2)	a. Maintain the daily average combustion zone temperature above the level established during the performance test.	Collecting the hourly and daily average temperature monitoring data according to § 63.1572; and maintaining the daily average combustion zone temperature at or above the limit established during the performance test.
	b. The daily average oxygen concentration in the vent stream (percent, dry basis) must not fall below the level established during the performance test.	Collecting the hourly and daily average O_2 monitoring data according to § 63.1572; and maintaining the average O_2 concentration above the level established during the performance test.

TABLE 36 TO Subpart UUU OF PART 63.—WORK PRACTICE STANDARDS FOR HAP EMISSIONS FROM BYPASS LINES

[As stated in § 63.1569(a)(1), you must meet each work practice standard in the following table that applies to you]

Option	You must meet one of these equipment standards * * *
1. Option 1	Install and operate a device (including a flow indicator, level recorder, or electronic valve position monitor) to continuously detect, at least every hour, whether flow is present in the bypass line. Install the device at or as near as practical to the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere.
2. Option 2	Install a car-seal or lock-and-key device placed on the mechanism by which the bypass device flow position is controlled (e.g., valve handle, damper level) when the bypass device is in the closed position such that the bypass line valve cannot be opened without breaking the seal or removing the device.
3. Option 3	
4. Option 4	Seal the bypass line by installing a solid blind between piping flanges.
	Vent the bypass line to a control device that meets the appropriate requirements in this subpart.

TABLE 37 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS FOR BYPASS LINES

[As stated in § 63.1569(b)(1), you must meet each requirement in the following table that applies to you]

For this standard . . .	You must . . .
1. Option 1: Install and operate a flow indicator, level recorder, or electronic valve position monitor.	Record during the performance test for each type of control device whether the flow indicator, level recorder, or electronic valve position monitor was operating and whether flow was detected at any time during each hour of level the three runs comprising the performance test.

TABLE 38 TO Subpart UUU OF PART 63.—INITIAL COMPLIANCE WITH WORK PRACTICE STANDARDS FOR HAP EMISSIONS FROM BYPASS LINES

[As stated in § 63.1569(b)(2), you must meet each requirement in the following table that applies to you]

For * * *	For this work practice standard * * *	You have demonstrated initial compliance if * * *
1. Each new or existing bypass line associated with a catalytic cracking unit, catalytic reforming unit, or sulfur recovery unit.	a. Option 1: Install and operate a device (including a flow indicator, level recorder, or electronic valve position monitor) to continuously detect, at least every hour, whether flow is present in the bypass line. Install the device at or as near as practical to the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere.	The installed equipment operates properly during each run of the performance test and no flow is present in the line during the test.
	b. Option 2: Install a car-seal or lock-and-key device placed on the mechanism by which the bypass device flow position is controlled (e.g., valve handle, damper level) when the bypass device is in the closed position such that the bypass line valve cannot be opened without breaking the seal or removing the device.	As part of the notification of compliance status, you certify that you installed the equipment, the equipment was operational by your compliance date, and you identify what equipment was installed.
	c. Option 3: Seal the bypass line by installing a solid blind between piping flanges.	See item 1.b. of this table.
	d. Option 4: Vent the bypass line to a control device that meets the appropriate requirements in this subpart.	See item 1.b. of this table.

TABLE 39 TO Subpart UUU OF PART 63.—CONTINUOUS COMPLIANCE WITH WORK PRACTICE STANDARDS FOR HAP EMISSIONS FROM BYPASS LINES

[As stated in § 63.1569(c)(1), you must meet each requirement in the following table that applies to you]

If you elect this standard * * *	You must demonstrate continuous compliance by * * *
1. Option 1: Flow indicator, level recorder, or electronic valve position monitor.	Continuously monitoring and recording whether flow is present in the bypass line; visually inspecting the device at least once every hour if the device is not equipped with a recording system that provides a continuous record; and recording whether the device is operating properly and whether flow is present in the bypass line.
2. Option 2: Car-seal or lock-and-key device	Visually inspecting the seal or closure mechanism at least once every month; and recording whether the bypass line valve is maintained in the closed position and whether flow is present in the line.
3. Option 3: Solid blind flange	Visually inspecting the blind at least once a month; and recording whether the blind is maintained in the correct position such that the vent stream cannot be diverted through the bypass line.
4. Option 4: Vent to control device	Monitoring the control device according to appropriate subpart requirements.
5. Option 1, 2, 3, or 4	Recording and reporting the time and duration of any bypass.

TABLE 40 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR INSTALLATION, OPERATION, AND MAINTENANCE OF CONTINUOUS OPACITY MONITORING SYSTEMS AND CONTINUOUS EMISSION MONITORING SYSTEMS

[As stated in § 63.1572(a)(1) and (b)(1), you must meet each requirement in the following table that applies to you]

This type of continuous opacity or emission monitoring system * * *	Must meet these requirements * * *

1. Continuous opacity monitoring system	Performance specification 1 (40 CFR Part 60, appendix B).
2. CO continuous emission monitoring system	Performance specification 4 (40 CFR Part 60, appendix B); span value of 1,000 ppm; and procedure 1 (40 CFR Part 60, appendix F) except relative accuracy test audits are required annually instead of quarterly.
3. CO continuous emission monitoring system used to demonstrate emissions average under 50 ppm (dry basis).	Performance specification 4 (40 CFR Part 60, appendix B); and span value of 100 ppm.
4. SO_2 continuous emission monitoring for sulfur recovery unit with oxidation control system or reduction control system; this monitor must include an O_2 monitor for correcting the data for excess air.	Performance specification 2 (40 CFR Part 60, appendix B); span values of 500 ppm SO_2 and 10 percent O_2; use Methods 6 or 6C and 3A or 3B (40 CFR Part 60, Appendix A) for certifying O_2 monitor; and procedure 1 (40 CFR Part 60, appendix F) except relative accuracy test audits are required annually instead of quarterly.
5. Reduced sulfur and O_2 continuous emission monitoring system for sulfur recovery unit with reduction control system not followed by incineration; this monitor must include an O_2 monitor for correcting the data for excess air unless exempted.	Performance specification 5 (40 CFR Part 60, appendix B), except calibration drift specification is 2.5 percent of the span value instead of 5 percent; 450 ppm reduced sulfur and 10 percent O_2; use Methods 15 or 15A and 3A or 3B (40 CFR Part 60, Appendix A) for certifying O_2 monitor; if Method 3A or 3B yields O_2 concentrations below 0.25 percent during the performance evaluation, the O_2 concentration can be assumed to be zero and the O_2 monitor is not required; and procedure 1 (40 CFR Part 60, appendix F), except relative accuracy test audits, are required annually instead of quarterly.
6. Instrument with an air or O2 dilution and oxidation system to convert reduced sulfur to SO_2 for continuously monitoring the concentration of SO_2 instead of reduced sulfur monitor and O_2 monitor.	Performance specification 5 (40 CFR Part 60, appendix B); span value of 375 ppm SO_2 and 10 percent O_2; use Methods 15 or 15A and 3A or 3B for certifying O_2 monitor; and procedure 1 (40 CFR Part 60, appendix F), except relative accuracy test audits, are required annually instead of quarterly.
7. TRS continuous emission monitoring system for sulfur recovery unit; this monitor must include an O_2 monitor for correcting the data for excess air.	Performance specification 5 (40 CFR Part 60, appendix B).
8. O_2 monitor for oxygen concentration	If necessary due to interferences, locate the oxygen sensor prior to the introduction of any outside gas stream; performance specification 3 (40 CFR Part 60, appendix B; span value for O_2 sensor is 10 percent; and procedure 1 (40 CFR Part 60, appendix F), except relative accuracy test audits, are required annually instead of quarterly.

TABLE 41 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR INSTALLATION, OPERATION, AND MAINTENANCE OF CONTINUOUS PARAMETER MONITORING SYSTEMS—Continued

[As stated in § 63.1572(c)(1), you must meet each requirement in the following table that applies to you]

If you use a continuous parameter monitoring system to measure and record * * *	You must * * *
1. Voltage and secondary current or total power input.	At least monthly, inspect all components of the continuous parameter monitoring system for integrity and all electrical connections for continuity; and record the results of each inspection.
2. Pressure drop [1]	Locate the pressure sensor(s) in a position that provides a representative measurement of the pressure; minimize or eliminate pulsating pressure, vibration, and internal and external corrosion; use a gauge with an accuracy ± 2 percent over the operating range; check pressure tap for plugs at least once a week; using a manometer, check gauge calibration quarterly and transducer calibration monthly; for a semi-regenerative catalytic reforming unit, you can check the calibration quarterly and monthly or prior to regeneration, whichever is longer; record the results of each calibration; conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range, or install a new pressure sensor; at least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage; and record the results of each inspection. Locate the flow sensor(s) and other necessary equipment such as straightening vanes in a position

3. Air flow rate, gas flow rate, or total water (or scrubbing liquid) flow rate.	that provides representative flow; use a flow rate sensor with an accuracy within ±5 percent; reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances; conduct a flow sensor calibration check at least semiannually; for a semi-regenerative catalytic reforming unit, you can check the calibration at least semiannually or prior to regeneration, whichever is longer; record the results of each calibration; if you elect to comply with Option 3 (Ni lb/hr) or Option 4 (Ni lb/1,000 lbs of coke burn-off) for the HAP metal emission limitations in § 63.1564, install the continuous parameter monitoring system for gas flow rate as close as practical to the continuous opacity monitoring system; and if you don't use a continuous opacity monitoring system, install the continuous parameter monitoring system for gas flow rate as close as practical to the control device.
4. Combustion zone temperature	Install the temperature sensor in the combustion zone or in the ductwork immediately downstream of the combustion zone before any substantial heat exchange occurs; locate the temperature sensor in a position that provides a representative temperature; use a temperature sensor with an accuracy of ±1 percent of the temperature being measured, expressed in degrees Celsius (C) or ±0.5 degrees C, whichever is greater; shield the temperature sensor system from electromagnetic interference and chemical contaminants; if you use a chart recorder, it must have a sensitivity in the minor division of at least 20 degrees Fahrenheit; perform an electronic calibration at least semiannually according to the procedures in the manufacturer's owners manual; following the electronic calibration, conduct a temperature sensor validation check, in which a second or redundant temperature sensor placed nearby the process temperature sensor must yield a reading within 16.7 degrees C of the process temperature sensor's reading; record the results of each calibration and validation check; conduct calibration and validation checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range, or install a new temperature sensor; and at least monthly, inspect all components for integrity and all electrical connections for continuity, oxidation, and galvanic corrosion.
5. pH	Locate the pH sensor in a position that provides a representative measurement of pH; ensure the sample is properly mixed and representative of the fluid to be measured; check the pH meter's calibration on at least two points every 8 hours of process operation; at least monthly, inspect all components for integrity and all electrical components for continuity; record the results of each inspection; and if you use pH strips to measure the pH of the water exiting a wet scrubber as an alternative to a continuous parameter monitoring system, you must use pH strips with an accuracy of ±10 percent.
6. HCl concentration	Use a colormetric tube sampling system with a printed numerical scale in ppmv, a standard measurement range of 1 to 10 ppmv (or 1 to 30 ppmv if applicable), and a standard deviation for measured values of no more than ±15 percent. System must include a gas detection pump and hot air probe if needed for the measurement range.

TABLE 42 TO Subpart UUU OF PART 63.—ADDITIONAL INFORMATION FOR INITIAL NOTIFICATION OF COMPLIANCE STATUS

[As stated in § 63.1574(d), you must meet each requirement in the following table that applies to you]

For * * *	You must provide this additional information * * *

Emissions Unit ID: P011

1. Identification of affected emissions units and emission points.	Nature, size, design, method of operation, operating design capacity of each affected emissions unit; identify each emission point for each HAP; identify any affected emissions unit or vent associated with an affected emissions unit not subject to the requirements of Subpart UUU.
2. Initial compliance	Identification of each emission limitation you will meet for each affected emissions unit, including any option you select (i.e., NSPS, PM or Ni, flare, percent reduction, concentration, options for bypass lines); if applicable, certification that you have already conducted a performance test to demonstrate initial compliance with the NSPS for an affected emissions unit; certification that the vents meet the applicable emission limit and the continuous opacity or that the emission monitoring system meets the applicable performance specification; if applicable, certification that you have installed and verified the operational status of equipment by your compliance date for each bypass line that meets the requirements of Option 2, 3, or 4 in § 63.1569 and what equipment you installed; identification of the operating limit for each affected emissions unit, including supporting documentation; if your affected emissions unit is subject to the NSPS, certification of compliance with NSPS emission limitations and performance specifications; a brief description of performance test conditions (capacity, feed quality, catalyst, etc.); an engineering assessment (if applicable); and if applicable, the flare design (e.g., steam-assisted, air-assisted, or non-assisted), all visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the Method 22 test.
3. Continuous compliance	Each monitoring option you elect; and identification of any unit or vent for which monitoring is not required; and the definition of ‘‘operating day.’’ (This definition, subject to approval by the applicable permitting authority, must specify the times at which a 24-hr operating day begins and ends.)

TABLE 43 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR REPORTS
[As stated in § 63.1575(a), you must meet each requirement in the following table that applies to you]

You must submit a(n) * * *	The report must contain * * *	You must submit the report * * *
1. Compliance report	If there are not deviations from any emission limitation or work practice standard that applies to you, a statement that there were no deviations from the standards during the reporting period and that no continuous opacity monitoring system or continuous emission monitoring system was inoperative, inactive, out-of-control, repaired, or adjusted; and if you have a deviation from any emission limitation or work practice standard during the reporting period, the report must contain the information in § 63.1575(d) or (e)	Semiannually according to the requirements in § 63.1575(b).

Table 44 to Subpart UUU of Part 63 - Applicability of NESHAP General Provisions to Subpart UUU
As stated in §63.1577, you must meet each requirement in the following table that applies to you.

Citation	Subject	Applies to Subpart UUU	Explanation
§63.1	Applicability	Yes	Except that Subpart UUU specifies calendar or operating day.
§63.2	Definitions	Yes	
§63.3	Units and Abbreviations	Yes	
§63.4	Prohibited Activities	Yes	
§63.5(a)-(c)	Construction and Reconstruction	Yes	In §63.5(b)(4), replace the reference to §63.9 with §63.9(b)(4) and (5).
§63.5(d)(1)(i)	Application for Approval of Construction or Reconstruction - General Application Requirements	Yes	Except, Subpart UUU specifies the application is submitted as soon as practicable before startup but no later than 90 days (rather than 60) after the promulgation date where construction or reconstruction had commenced and initial startup had not occurred before promulgation.
§63.5(d)(1)(ii)		Yes	Except that emission estimates specified in §63.5(d)(1)(ii)(H) are not required.
§63.5(d)(1)(iii)		No	Subpart UUU specifies submission of notification of compliance status.
§63.5(d)(2)		No	
§63.5(d)(3)		Yes	Except that §63.5(d)(3)(ii) does not apply.
§63.5(d)(4)		Yes	
§63.5(e)	Approval of Construction or Reconstruction	Yes	

§63.5(f)(1)	Approval of Construction or Reconstruction Based on State Review	Yes	
§63.5(f)(2)		Yes	Except that 60 days is changed to 90 days and cross-reference to §63.9(b)(2) does not apply.
§63.6(a)	Compliance with Standards and Maintenance - Applicability	Yes	
§63.6(b)(1)-(4)	Compliance Dates for New and Reconstructed Emissions units	Yes	
§63.6(b)(5)		Yes	Except that Subpart UUU specifies different compliance dates for emissions units.
§63.6(b)(6)	[Reserved]	Not appli-cable	
§63.6(b)(7)	Compliance Dates for New and Reconstructed Area Emissions units That Become Major	Yes	
§63.6(c)(1)-(2)	Compliance Dates for Existing Emissions units	Yes	Except that Subpart UUU specifies different compliance dates for emissions units subject to Tier II gasoline sulfur control requirements.
§63.6(c)(3)-(4)	[Reserved]	Not appli-cable	
§63.6(c)(5)	Compliance Dates for Existing Area Emissions units That Become Major	Yes	
§63.6(d)	[Reserved]	Not appli-cable	
§63.6(e)(1)-(2)	Operation and Maintenance Requirements	Yes	
§63.6(e)(3)(i)-(iii)	Startup, Shutdown, and Malfunction Plan	Yes	
§63.6(e)(3)(iv)		Yes	Except that reports of actions not consistent with plan are not required within 2 and 7 days of action but rather must be included in next periodic report.
§63.6(e)(3)(v)-(viii)		Yes	The owner or operator is only required to keep the latest version of the plan.
§63.6(f)(1)-(2)(iii)(C)	Compliance with Emission Standards	Yes	
§63.6(f)(2)(iii)(D)		No	
§63.6(f)(2)(iv)-(v)		Yes	

§63.6(f)(3)		Yes	
§63.6(g)	Alternative Standard	Yes	
§63.6(h)	Opacity/VE Standards	Yes	
§63.6(h)(2)(i)	Determining Compliance with Opacity/VE Standards	No	Subpart UUU specifies methods.
§63.6(h)(2)(ii)	[Reserved]	Not applicable	
§63.6(h)(2)(iii)		Yes	
§63.6(h)(3)	[Reserved]	Not applicable	
§63.6(h)(4)	Notification of Opacity/VE Observation Date	Yes	Applies to Method 22 tests.
§63.6(h)(5)	Conducting Opacity/VE Observations	No	
§63.6(h)(6)	Records of Conditions During Opacity/VE Observations	Yes	Applies to Method 22 observations.
§63.6(h)(7)(i)	Report COM Monitoring Data from Performance Test	Yes	
§63.6(h)(7)(ii)	Using COM Instead of Method 9	No	
§63.6(h)(7)(iii)	Averaging Time for COM during Performance Test	Yes	
§63.6(h)(7)(iv)	COM Requirements	Yes	
§63.6(h)(8)	Determining Compliance with Opacity/VE Standards	Yes	
§63.6(h)(9)	Adjusted Opacity Standard	Yes	
§63.6(i)(1)-(14)	Extension of Compliance	Yes	Not applicable to an affected emissions unit with Tier II compliance date. May be applicable to an affected emissions unit exempt from Tier II rule.
§63.6(i)(15)	[Reserved]	Not applicable	
§63.6(i)(16)		Yes	
§63.6(j)	Presidential Compliance Exemption	Yes	
§63.7(a)(1)	Performance Test Requirements-Applicability	Yes	Except that Subpart UUU specifies the applicable test and demonstration procedures.
§63.7(a)(2)	Performance Test Dates	No	Test results must be submitted in the Notification of Compliance Status report due 150 days after the compliance date.
§63.7(a)(3)	Section 114 Authority	Yes	

§63.7(b)	Notifications	Yes	Except that Subpart UUU specifies notification at least 30 days prior to the scheduled test date rather than 60 days.
§63.7(c)	Quality Assurance Program/Site-Specific Test Plan	Yes	
§63.7(d)	Performance Test Facilities	Yes	
§63.7(e)	Conduct of Tests	Yes	
§63.7(f)	Alternative Test Method	Yes	
§63.7(g)	Data Analysis, RECORD KEEPING, Reporting	Yes	Except performance test reports must be submitted with notification of compliance status due 150 days after the compliance date.
§63.7(h)	Waiver of Tests	Yes	
§63.8(a)(1)	Monitoring Requirements - Applicability	Yes	
§63.8(a)(2)	Performance Specifications	Yes	
§63.8(a)(3)	[Reserved]	Not appli-cable	
§63.8(a)(4)	Monitoring with Flares	Yes	
§63.8(b)(1)	Conduct of Monitoring	Yes	
§63.8(b)(2)-(3)	Multiple Effluents and Multiple Monitoring Systems	Yes	Subpart UUU specifies the required monitoring locations.
§63.8(c)(1)	Monitoring System Operation and Maintenance	Yes	
§63.8(c)(1)(i)-(ii)	Startup, Shutdown, and Malfunctions	Yes	Except that Subpart UUU specifies that reports are not required if actions are consistent with the SSM plan, unless requested by the permitting authority. If actions are not consistent, actions must be described in next compliance report.
§63.8(c)(1)(iii)	Compliance with Operation and Maintenance Requirements	Yes	
§63.8(c)(2)-(3)	Monitoring System Installation	Yes	Except that Subpart UUU specifies that for continuous parameter monitoring systems, operational status verification includes completion of manufacturer written specifications or installation operation, and calibration of the system or other written procedures that provide adequate assurance that the equipment will monitor accurately.

§63.8(c)(4)	Continuous Monitoring System Requirements	No	Subpart UUU specifies operational requirements.
§63.8(c)(4)(i)-(ii)	Continuous Monitoring System Requirements	Yes	Except that these requirements apply only to a continuous opacity monitoring system or a continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or SO_2 limits.
§63.8(c)(5)	COM Minimum Procedures	Yes	
§63.8(c)(6)	CMS Requirements	No	Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or SO_2 limits.
§63.8(c)(7)-(8)	CMS Requirements	Yes	
§63.8(d)	Quality Control Program	Yes	Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or SO_2 limits.
§63.8(e)	CMS Performance Evaluation	Yes	Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or SO_2 limits. Results are to be submitted as part of the Notification of Compliance Status due 150 days after the compliance date.
§63.8(f)(1)-(5)	Alternative Monitoring Method	Yes	Except that Subpart UUU specifies procedures for requesting alternative monitoring systems and alternative parameters.
§63.8(f)(6)	Alternative to Relative Accuracy Test	Yes	Applicable to continuous emission monitoring systems if performance specification requires a relative accuracy test audit.
§63.8(g)(1)-(4)	Reduction of Monitoring Data	Yes	Applies to a continuous opacity monitoring system or continuous emission monitoring system.
§63.8(g)(5)	Data Reduction	No	Subpart UUU specifies requirements.
§63.9(a)	Notification Requirements - Applicability	Yes	Duplicate Notification of Compliance Status report to the Regional Administrator may be required.

§63.9(b)(1)-(5)	Initial Notifications	Yes	Except that notification of construction or reconstruction is to be submitted as soon as practicable before startup but no later than 30 days (rather than 60 days) after the effective date if construction or reconstruction had commenced but startup had not occurred before the effective date.
§63.9(c)	Request for Extension of Compliance	Yes	
§63.9(d)	New Emissions unit Notification for Special Compliance Requirements	Yes	
§63.9(e)	Notification of Performance Test	Yes	Except that notification is required at least 30 days before test.
§63.9(f)	Notification of VE/Opacity Test	Yes	
§63.9(g)	Additional Notification Requirements for Emissions units with Continuous Monitoring Systems	Yes	Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or SO_2 limits.
§63.9(h)	Notification of Compliance Status	Yes	Except that Subpart UUU specifies the notification is due no later than 150 days after compliance date.
§63.9(i)	Adjustment of Deadlines	Yes	
§63.9(j)	Change in Previous Information	Yes	
§63.10(a)	RECORD KEEPING and Reporting-Applicability	Yes	
§63.10(b)	Records	Yes	Except that §63.10(b)(2)(xiii) applies if you use a continuous emission monitoring system to meet the NSPS or you elect to meet the NSPS, CO, or SO_2 reduced sulfur limit and the performance evaluation requires a relative accuracy test audit.
§63.10(c)(1)-(6), (9)-(15)	Additional Records for Continuous Monitoring Systems	Yes	Except that these requirements apply if you use a continuous opacity monitoring system or a continuous emission monitoring system to meet the NSPS or elect to meet the NSPS opacity, CO, or SO_2 limits.
§63.10(c)(7)-(8)	Records of Excess Emissions and Exceedances	No	Subpart UUU specifies requirements.

§63.10(d)(1)	General Reporting Requirements	Yes	
§63.10(d)(2)	Performance Test Results	No	Subpart UUU requires performance test results to be reported as part of the Notification of Compliance Status due 150 days after the compliance date.
§63.10(d)(3)	Opacity or VE Observations	Yes	
§63.10(d)(4)	Progress Reports	Yes	
§63.10(d)(5)(i)	Startup, Shutdown, and Malfunction Reports	Yes	Except that reports are not required if actions are consistent with the SSM plan, unless requested by permitting authority.
§63.10(d)(5)(ii)		Yes	Except that actions taken during a startup, shut- down, or malfunction that are not consistent with the plan do not need to be reported within 2 and 7 days of commencing and completing the action, respectively, but must be included in the next periodic report.
§63.10(e)(1)-(2)	Additional CMS Reports	Yes	Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or SO_2 limits. Reports of performance evaluations must be submitted in Notification of Compliance Status.
§63.10(e)(3)	Excess Emissions/CMS Performance Reports	No	Subpart UUU specifies the applicable requirements.
§63.10(e)(4)	COMS Data Reports	Yes	
§63.10(f)	RECORD KEEPING/ Reporting Waiver	Yes	
§63.11	Control Device Requirements	Yes	Applicable to flares.
§63.13	Addresses	Yes	
§63.14	Incorporation by Reference	Yes	
§63.15	Availability of Information	Yes	

Emissions Unit ID: P011

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit consists of a Claus Sulfur Recovery Unit (SRU) in series with a SCOT unit, which is used to convert sulfur dioxide (SO2) to hydrogen sulfide (H2S) for further processing in the SRU. Acid gases from refinery processes are processed in the SRU to recover the sulfur. The SRU generates some SO2 which is treated in the same SCOT unit. The SCOT unit converts the SO2 from the SRU into H2S which is recycled back to the SRU. Both SRU's that are part of emissions units P011 and P016 discharge to either SCOT 1 or SCOT 2 unit which, in turn, vents to a thermal oxidizer for conversion of the residual H2S to SO2 prior to discharge into the ambient air. The thermal oxidizer is rated at 21 mmBtu/hr and burns only natural gas for fuel.	OAC rule 3745-18-82(E)	2.0 pounds of SO2 per 100 pounds of sulfur processed

2. **Additional Terms and Conditions**

2.a 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 This SO2 emission limitation is less stringent than the BAT requirements in section A.I.1 of this permit; however, because the units of this emission limitation are different than the units for the BAT requirements, monitoring, record keeping, and reporting requirements are specified below to ensure ongoing compliance with this emission limitation.

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

1. The permittee shall operate and maintain existing equipment to continuously monitor and record the SO_2 emissions from this emissions unit in units of the applicable standard(s). Such continuous monitoring and recording equipment shall operate in accordance with the requirements specified in 40 CFR Part 60.13.

2. 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 B.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.

3. The permittee shall maintain a written quality assurance/quality control plan for the continuous SO_2 monitoring system designed to ensure continuous valid and representative readings of SO_2. 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 SO_2 monitoring system must be kept on site and available for inspection during regular office hours.

4. Although the permittee is not subject to the provisions of 40 CFR Part 60, Appendix F, the Director of Ohio EPA has determined in accordance with ORC 3704.03(I), that the permittee must operate and maintain the CEMS for the SRU in accordance with 40 CFR Part 60, Appendix F in order to provide valid readings of SO_2 emissions on a continuous basis.

5. [40 CFR Part 60, Appendix F]
   The permittee shall check, record and quantify the calibration drift at two concentration values at least once daily according to Section 4 of 40 CFR Part 60, Appendix F, Procedure 1.

6. [40 CFR Part 60, Appendix F]
   The permittee shall comply with the Excessive Audit Inaccuracy requirements under section 5.2 of 40 CFR Part 60, Appendix F, Procedure 1.

IV. Reporting Requirements

1. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Canton City Health Department, Air Pollution Control Division documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of SO_2 values in excess of the applicable limit specified in OAC rule 3745-18-54(O)(9), including any bypassing of the amine-claus SRU to the refinery flare system. These reports shall also contain the total SO_2 emissions and total noncomplying SO_2 emissions for the calendar quarter (in tons).

   The permittee shall submit reports within 30 days following the end of each calendar quarter to the Canton City Health Department, Air Pollution Control Division documenting any continuous SO_2 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.

   If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

2. [40 CFR Part 60, Appendix F; Procedure 1, Section 7]
   The permittee shall submit a quarterly report for each CEMS, the accuracy results from Section 6 of 40 CFR Part 60, Appendix F and the CD assessment results from Section 4 of 40 CFR Part 60, Appendix F. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the information required by Section 7 of 40 CFR Part 60, Appendix F.

V. Testing Requirements

1. Compliance with the emission limitation in section B.I.1 of these terms and conditions shall be determined in accordance with the following method:

   Emission Limitation:

   2.0 pounds of SO_2 per 100 pounds of sulfur processed

   Applicable Compliance Method:

The test methods and procedures used for determining compliance with this emission limit are those specified in OAC rule 3745-18-04(B). The test for this emission limitation shall be done at the same time as the RATA test [see section A.V.] as long as the CEMS is used for compliance purposes. Compliance shall also be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.

2. Each CEMS must be audited at least once each calendar quarter. Successive quarterly audits shall occur no closer than 2 months. The audits shall be conducted as follows:

   a. Relative Accuracy Test Audit (RATA). The RATA must be conducted at least once every four calendar quarters. Conduct the RATA as described for the RA test procedure in the applicable PS in appendix B (e.g., PS 2 for SO_2 and NO_X). In addition, analyze the appropriate performance audit samples received from EPA as described in the applicable sampling methods (e.g., Methods 6 and 7).

   b. Cylinder Gas Audit (CGA). If applicable, a CGA may be conducted in accordance with Section 5.1.2 of 40 CFR Part 60, Appendix F, Procedure 1 in three of four calendar quarters, but in no more than three quarters in succession.

   c. Relative Accuracy Audit (RAA). The RAA may be conducted three of four calendar quarters, but in no more than three quarters in succession. To conduct a RAA, follow the procedure described in the applicable PS in appendix B for the relative accuracy test, except only three sets of measurement data are required. Analyses of EPA performance audit samples are also required.

VI. Miscellaneous Requirements

1. Continuous SO_2 Monitoring - Certified Systems Statement of Certification

   A statement of certification of the existing continuous SO_2 monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 6. Proof of certification shall be made available to the City of Canton Health Department, Division of Air Pollution Control upon request.

Emissions Unit ID: P013

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P013 Fugitive VOC leaks from the following petroleum refinery equipment:	OAC rule 3745-21-09(T)	No limits - see section A.I.2.a.
	40 CFR Part 60, Subpart GGG 40 CFR Part 60, Subpart VV (as referenced in Subpart GGG)	No limits
the Vacuum Unit Tail gas Compressor System, and the flanges and valves installed with the Gas Con debutanizer overhead Air cooled exchanger. These emissions units are not subject to 40 CFR Parts 63, Subpart CC or 40 CFR Part 63, Subpart UUU (Refinery MACT's).	OAC rule 3745-31-05(A)(3) (PTI No. 15-1319)	BAT consists of compliance with the applicable parts of 40 CFR Part 60, Subpart GGG and OAC rule 3745-21-09(T) and the following mass emission limit: 4.42 tpy of VOC This limit is only for the emissions from the Vacuum Unit Tailgas Compressor System. Emissions consist of gases from the system.
	(PTI No. 15-1531)	BAT for the following emissions units consists of compliance with OAC rule 3745-21-09(T) and the following mass emission limitation: 1.77 tpy of VOC This limit is only for the emissions from the valves, and flanges in light liquid and gas service for the Gas Con debutanizer overhead Air cooled exchanger project.

2. Additional Terms and Conditions

2.a The permittee shall comply with the equipment leaks provisions of OAC rule 3745-21-09(T) as specified in Part II (Facility Section) of this permit.

2.b The permittee shall implement the enhancements to the leak detection and repair program by no later than November 11, 2004 as outlined in Paragraph 20 of the global settlement agreement dated August 28, 2001 between Marathon Ashland Petroleum, LLC (MAP) and the United States of America(Civil NO. 01-40119). Although the enhancements will terminate on December 31, 2008, MAP obtained release from civil liabilities associated with 40 CFR Part 60, Subparts A&J for projects and activities conducted prior to May 11, 2001.

II. Operational Restrictions

1. [40 CFR Part 60.590]
40 CFR Part 60, Subpart GGG - Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries is applicable to the compressor because the compressor is an affected facility as defined in 60.590(a)(2). These standards are not applicable to the associated pipeline components because they do not constitute a capital expenditure and thus are not a modification. In order to comply with 40 CFR Part 61, Subpart GGG, the permittee has agreed to comply with the following operational restrictions:

   a. [40 CFR Part 60.482-3(a)]
   In order to comply with 60.482-3(a), the compressor shall be equipped with a barrier fluid seal system on each through-casing shaft penetration. Ambient temperature lube oil (SAE 40 or equivalent) will be the barrier fluid;

   b. [40 CFR Part 60.482-3(b)(1)]
   In order to comply with 60.482-3(b)(1), the compressor barrier fluid system will be pressurized with nitrogen to a pressure of about 25 psig; and

   c. [40 CFR Part 60.482-3(b)(3)]
   In order to comply with 60.482-3(b)(3), if the seal system leaks, the barrier fluid will leak into the tailgas compressor; thus, no VOC emissions to the atmosphere will result because the barrier fluid is in heavy liquid service or is not in VOC service.

   d. [40 CFR Part 60.482(h)]
   The permittee may elect to comply with the requirements of 60.482(h) if the compressor is equipped with a closed vent system capable of capturing and transporting any leakage from the seal to a control device that complies with the requirements of 60.482-10. Compliance with 60.482(h) will exempt the compressor from the requirements of Terms and Conditions A.II.1 through A.II.3, except as provided in Term and Condition A.II.5.

   e. [40 CFR Part 60.482(I)]
   The permittee may elect to comply with the requirements of 60.482(I) if the compressor is designated, as described in 60.486(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background. Compliance with 60.482(I) will exempt the compressor from the requirements of Terms and Conditions A.II.1 through A.II.4.

Pressure relief devices in gas/vapor service.

2. [40 CFR Part 60.482-4(a)]
Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with not detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in 40 CFR Part 60.485(c).

3. [40 CFR Part 60.482-4(b)(1)]
After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in 40 CFR Part 60.485(c).

   a. [40 CFR Part 60.482-4(b)(2)]
   No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in 40 CFR Part 60.485(c).

4. [40 CFR Part 60.482-4(c)]
Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in 40 CFR Part 60.482-10 is exempted from the requirements of section A.II.2. and A.II.3.

5. [40 CFR Part 60.482-4(d)(1)]
Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of section A.II.2. and A.II.3., provided the permittee complies with the requirements in section A.II.6.

6. [40 CFR Part 60.482-4(d)(2)]
After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR Part 60.482-9.

Sampling connection systems.

7. [40 CFR Part 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 CFR 40 Part 60.482-1(c). Gases displaced during filling of the sample container are not required to be collected or captured.

8. [40 CFR Part 60.482-5**(**b)]
Each closed-purge, closed-loop, or closed-vent system as required in paragraph (a) of this section shall comply with the requirements specified in section A.II.8.a through A.II.8.d.

   a. [40 CFR Part 60.482-5(b)(1)]
   Return the purged process fluid directly to the process line; or

   b. [40 CFR Part 60.482-5(b)(2)]
   Collect and recycle the purged process fluid to a process; or

c. [40 CFR Part 60.482-5(b)(3)]
Be designed and operated to capture and transport all the purged process fluid to a control device that complies with the requirements of 40 CFR Part 60.482-10; or

d. [40 CFR Part 60.482-5(b)(4)]
Collect, store, and transport the purged process fluid to any of the following systems or facilities:

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

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

iii. [40 CFR Part 60.482-5(b)(4)(iii)]
A facility permitted, licensed, or registered by a State to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 CFR Part 261.

9. [40 CFR Part 60.482-5(c)]
In situ sampling systems and sampling systems without purges are exempt from the requirements of sections A.II.7. and A.II.8.

Open-ended valves or lines.

10. [40 CFR Part 60.482-6(a)(1)]
Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR Part 60.482-1(c).

a. [40 CFR Part 60.482-6(a)(2)]
The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.

11. [40 CFR Part 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.

12. [40 CFR Part 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 section A.II.10 at all other times.

13. [40 CFR Part 60.482-6(d)]
Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of sections A.II.10. through A.II.12.

14. [40 CFR Part 60.482-6(e)]
Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious over pressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in sections A.II.10 through A.II.12 are exempt from the requirements of sections A.II.10 through A.II.12.

Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors.

15. [40 CFR Part 60.482-8(a)]
If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, the owner or operator shall follow either one of the following procedures:

    a. [40 CFR Part 60.482-8(a)(1)]
    The permittee shall monitor the equipment within 5 days by the method specified in 40 CFR Part 60.485(b) and shall comply with the requirements of sections A.II.16 through A.II.18;

    b. [40 CFR Part 60.482-8(a)(2)]
    The permittee shall eliminate the visual, audible, olfactory, or other indication of a potential leak.

16. [40 CFR Part 60.482-8(b)]
If an instrument reading of 10,000 ppm or greater is measure, a leak is detected.

17. [40 CFR Part 60.482-8(c)(1)]
When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR Part 60.482-9.

    a. [40 CFR Part 60.482-8(c)(2)]
    The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

18. [40 CFR Part 60.482-8(d)]
First attempts at repair include, but are not limited to, the best practices described under 40 CFR Part 60.482-7(e).

Delay of repair.

19. [40 CFR Part 60.482.9(a)]
Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.

20. [40 CFR Part 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.

21. [40 CFR Part 60.482.9(c)]
Delay of repair for valves will be allowed if:

a. [40 CFR Part 60.482.9(c)(1)]
The permittee demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair; and

b. [40 CFR Part 60.482.9(c)(2)]
When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR Part 60.482-10.

22. [40 CFR Part 60.482.9(d)]
Delay of repair for pumps will be allowed if:

a. [40 CFR Part 60.482.9(d)(1)]
Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and

b. [40 CFR Part 60.482.9(d)(2)]
Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

23. [40 CFR Part 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.

III. Monitoring and/or Record Keeping Requirements

1. [40 CFR Part 60.482-3(d)]
In order to comply with 40 CFR Part 60.482-3(d), the compressor shall be equipped with a seal failure alarm that will alarm when the seal reservoir level has dropped, indicating a seal failure. If the barrier fluid system fails again, a low-level alarm shall indicate failure. In addition, a low, low-level shutdown will shut down the compressor in the event that the alarm condition is not remedied and the seal level continues to fall.

2. [40 CFR Part 60.482-3(e)]
In order to comply with 40 CFR Part 60.482-3(e), operations shall check the reservoir level of the compressor on a daily basis, and there shall be an audible alarm sounded in the control room indicating seal failure and compressor shutdown.

Pumps in light liquid service.

3. [40 CFR Part 60.482-2(a)(1)]
Each pumping light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR Part 60.482-1(c) and sections A.III.6 and A.III.7.

a. [40 CFR Part 60.482-2(a)(2)]
Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

4. [40 CFR Part 60.482-2(b)(1)]
If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

   a. [40 CFR Part 60.482-2(b)(2)]
   If there are indications of liquids dripping from the pump seal, a leak is detected.

5. [40 CFR Part 60.482-2(c)(1)]
When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR Part 60.482-9.

   a. [40 CFR Part 60.482-2(c)(2)]
   A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

6. [40 CFR Part 60.482-2(d)]
Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraph (a), provided the following requirements are met:

   a. [40 CFR Part 60.482-2(d)(1)]
   Each dual mechanical seal system is:

      i. Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or

      ii. Equipment 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 Part 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.

   b. [40 CFR Part 60.482-2(d)(2)]
   The barrier fluid system is in heavy liquid service or is not in VOC service.

   c. [40 CFR Part 60.482-2(d)(3)]
   Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.

   d. [40 CFR Part 60.482-2(d)(4)]
   Each pump is checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.

   e. [40 CFR Part 60.482-2(d)(5)(i)]
   Each sensor as described in section A.III.6.c. is checked daily or is equipped with an audible alarm, and

      i. [40 CFR Part 60.482-2(d)(5)(ii)]
      The permittee determines, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

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

i. [40 CFR Part 60.482-2(d)(6)(ii)]
When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR Part 60.482-9.

ii. [40 CFR Part 60.482-2(d)(6)(iii)]
A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

7. [40 CFR Part 60.482-2(e)]
Any pump that is designated, as described in 40 CFR Part 60.486(e)(1) and (2), for no detectable emission, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of sections A.II.8., A.III.5. and A.III.6. if the pump:

a. [40 CFR Part 60.482-2(e)(1)]
Has no externally actuated shaft penetrating the pump housing;

b. [40 CFR Part 60.482-2(e)(2)]
Is demonstrated to be operating with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in 40 CFR Part 60.485(c), and

c. [40 CFR Part 60.482-2(e)(3)]
Is tested for compliance with section A.III.7.b. of this section initially upon designation, annually, and at other times requested by the Administrator.

8. [40 CFR Part 60.482-2(g)]
Any pump that is designated, as described in 40 CFR Part 60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of sections A.III.3 and A.III.6 through A.III.6.f. if:

a. [40 CFR Part 60.482-2(g)(1)]
The permittee 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 this section; and

b. [40 CFR Part 60.482-2(g)(2)]
The permittee 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 section A.III.5., if a leak is detected.

9. [40 CFR Part 60.482-2(h)]
Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of section A.III.3.a. and A.III.6.d. , and the daily requirements of

section A.III.6.e., provided that each pump is visually inspected as often as practicable and at least monthly.

Valves in gas/vapor service and in light liquid service.

10. [40 CFR Part 60.482-7(a)]
Each valve shall be monitored monthly to detect leaks by the methods specified in 40 CFR Part 60.485(b) and shall comply with sections A.III.11 through A.III.14., except as provided in 40 CFR Part 60.483-1, 2, and 40 CFR Part 60.482-1(c).

11. [40 CFR Part 60.482-7(b)]
If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

12. [40 CFR Part 60.482-7(c)(1)]
Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.

    a. [40 CFR Part 60.482-7(c)(2)]
    If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.

13. [40 CFR Part 60.482-7(d)(1)]
When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 60.482-9.

    a. [40 CFR Part 60.482-7(d)(2)]
    A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

14. [40 CFR Part 60.482-7(e)]
First attempts at repair include, but are not limited to, the following best practices where practicable:

    a. [40 CFR Part 60.482-7(e)(1)]
    Tightening of bonnet bolts;

    b. [40 CFR Part 60.482-7(e)(2)]
    Replacement of bonnet bolts;

    c. [40 CFR Part 60.482-7(e)(3)]
    Tightening of packing gland nuts;

    d. [40 CFR Part 60.482-7(e)(4)]
    Injection of lubricant into lubricated packing.

15. [40 CFR Part 60.482-7(f)]
Any valve that is designated, as described in 40 CFR Part 60.486(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 section A.III.10. if the valve:

a. [40 CFR Part 60.482-7(f)(1)]
Has no external actuating mechanism in contact with the process fluid;

b. [40 CFR Part 60.482-7(f)(2)]
Is operated with emissions less than 500 ppm above background as determined by the method specified in 40 CFR Part 60.485(c); and

c. [40 CFR Part 60.482-7(f)(3)]
Is tested for compliance with Section A.III.15.b. of this section initially upon designation, annually, and at other times requested by the Administrator.

16. [40 CFR Part 60.482-7(g)]
Any valve that is designated, as described in 40 CFR Part 60.486(f)(1), as unsafe-to monitor valve is exempt from the requirements of section A.III.10.

a. [40 CFR Part 60.482-7(g)(1)]
The permittee demonstrates that the valve is unsafe-to- monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with section A.III.10.

b. [40 CFR Part 60.482-7(g)(2)]
The permittee adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.

17. [40 CFR Part 60.482-7(h)]
Any valve that is designated, as described in 40 CFR Part 60.486(f)(2), as a difficult-to-monitor valve is exempt form the requirements of section A.III.10.

a. [40 CFR Part 60.482-7(h)(1)]
The permittee demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.

b. [40 CFR Part 60.482-7(h)(2)]
The process unit within which the valve is located either becomes an affected facility through 40 CFR Part 60.14 or 60.15 or the permittee designates less than 3.0 percent of the total number of valves as difficult-to-monitor, and

c. [40 CFR Part 60.482-7(h)(3)]
The permittee follows a written plan that requires monitoring of the valve at least once per calendar year.

Record Keeping Requirements

18. [40 CFR Part 60.486(b)]
When each leak is detected as specified in 40 CFR Parts 60.482-2, 60.482-7, 60.482-8, and 60.483-2, the following requirements apply:

a. [40 CFR Part 60.486(b)(1)]
A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

b. [40 CFR Part 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 Part 60.482-7(c) and no leak has been detected during those 2 months.

c. [40 CFR Part 60.486(b)(3)]
The identification on equipment except on a valve, may be removed after it has been repaired.

19. [40 CFR Part 60.486(c)]
When each leak is detected as specified in 40 CFR Parts 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:

a. [40 CFR Part 60.486(c)(1)]
The instrument and operator identification numbers and the equipment identification number.

b. [40 CFR Part 60.486(c)(2)]
The date the leak was detected and the dates of each attempt to repair the leak.

c. [40 CFR Part 60.486(c)(3)]
Repair methods applied in each attempt to repair the leak.

d. [40 CFR Part 60.486(c)(4)]
"Above 10,000" if the maximum instrument reading measured by the methods specified in 40 CFR Part 60.485(a) after each repair attempt is equal to or greater than 10,000 ppm.

e. [40 CFR Part 60.486(c)(5)]
"Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

f. [40 CFR Part 60.486(c)(6)]
The signature of the permittee whose decision it was that repair could not be effected without a process shutdown.

g. [40 CFR Part 60.486(c)(7)]
The expected date of successful repair of the leak if a leak is not repaired within 15 days.

h. [40 CFR Part 60.486(c)(8)]
Dates of process unit shutdowns that occur while the equipment is unrepaired.

i. [40 CFR Part 60.486(c)(9)]
The date of successful repair of the leak.

20. [40 CFR Part 60.486(d)]
The following information pertaining to the design requirements for closed vent systems and control devices described in 40 CFR Part 60.482-10 shall be recorded and kept in a readily accessible location:

a. [40 CFR Part 60.486(d)(1)]

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

b. [40 CFR Part 60.486(d)(2)]
The dates and descriptions of any changes in the design specifications.

c. [40 CFR Part 60.486(d)(3)]
A description of the parameter or parameters monitored, as required in 40 CFR Part 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 (were) selected for the monitoring.

d. [40 CFR Part 60.486(d)(4)]
Periods when the closed vent systems and control devices required in 40 CFR Parts 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.

e. [40 CFR Part 60.486(d)(5)]
Dates of startups and shutdowns of the closed vent systems and control devices required in 40 CFR Parts 60.482-2, 60.482-3, 60.482-4, and 60.482-5.

21. [40 CFR Part 60.486(e)]
The following information pertaining to all equipment subject to the requirements in 40 CFR Parts 60.482-1 to 60.482-10 shall be recorded in a log that is kept in a readily accessible location:

a. [40 CFR Part 60.486(e)(1)]
A list of identification numbers for equipment subject to the requirements of this subpart.

b. [40 CFR Part 60.486(e)(2)(i)]
A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR Parts 60.482-2(e), 60.482-3(i) and 60.482-7(f).

i. [40 CFR Part 60.486(e)(2)(ii)]
The designation of equipment as subject to the requirements of 40 CFR Parts 60.482-2(e), 60.482-3(i), or 60.482-7(f) shall be signed by the owner or operator.

c. [40 CFR Part 60.486(e)(3)]
A list of equipment identification numbers for pressure relief devices required to comply with 40 CFR Part 60.482-4.

d. [40 CFR Part 60.486(e)(4)(i)]
The dates of each compliance test as required in 40 CFR Parts 60.482-2(e), 60.482-3(i), 60.482-4, and 60.482-7(f).

i. [40 CFR Part 60.486(e)(4)(ii)]
The background level measured during each compliance test.

ii. [40 CFR Part 60.486(e)(4)(iii)]
The maximum instrument reading measured at the equipment during each compliance test.

e. [40 CFR Part 60.486(e)(5)]
A list of identification numbers for equipment in vacuum service.

22. [40 CFR Part 60.486(f)]
The following information pertaining to all valves subject to the requirements of 40 CFR Part 60.482-7(g) and (h) and to all pumps subject to the requirements of 40 CFR Part 60.482-2(g) shall be recorded in a log that is kept in a readily accessible location:

a. [40 CFR Part 60.486(f)(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.

b. [40 CFR Part 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 valve.

23. [40 CFR Part 60.486(g)]
The following information shall be recorded for valves complying with 40 CFR Part 60.483-2:

a. [40 CFR Part 60.486(g)(1)]
A schedule of monitoring.

b. [40 CFR Part 60.486(g)(2)]
The percent of valves found leaking during each monitoring period.

24. [40 CFR Part 60.486(h)]
The following information shall be recorded in a log that is kept in a readily accessible location:

a. [40 CFR Part 60.486(h)(1)]
Design criterion required in 40 CFR Parts 60.482-2(d)(5) and 60.482-3(e)(2) and explanation of the design criterion; and

b. [40 CFR Part 60.486(h)(2)]
Any changes to this criterion and the reasons for the changes.

25. [40 CFR Part 60.486(i)]
The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 CFR Part 60.480(d):

a. [40 CFR Part 60.486(i)(1)]
An analysis demonstrating the design capacity of the affected facility.

b. [40 CFR Part 60.486(i)(2)]
A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol, and

c. [40 CFR Part 60.486(i)(3)]
An analysis demonstrating that equipment is not in VOC service.

26. [40 CFR Part 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.

27. [40 CFR Part 60.486(k)]
The provisions of 40 CFR Part 60.7(b) and (d) do not apply to affected facilities subject to this subpart.

IV. Reporting Requirements

1. [40 CFR Part 60.487(a)]
Each owner or operator subject to the provisions of this subpart shall submit semiannual reports to the Administrator beginning six months after the initial startup date.

2. [40 CFR Part 60.487(b)]
The initial semiannual report to the Administrator shall include the following information:

   a. [40 CFR Part 60.487(b)(1)]
   Process unit identification.

   b. [40 CFR Part 60.487(b)(2)]
   Number of valves subject to the requirements of 40 CFR Part 60.482-7, excluding those valves designated for no detectable emissions under the provisions of 40 CFR Part 60.482-2(e) and those pumps complying with 40 CFR Part 60.482-2(f).

   c. [40 CFR Part 60.487(b)(3)]
   Number of pumps subject to the requirements of 40 CFR Part 60.482-2, excluding those pumps designated for no detectable emissions under the provisions of 40 CFR Part 60.482-2(e) and those pumps complying with 40 CFR Part 60.482-2(f).

   d. [40 CFR Part 60.487(b)(4)]
   Number of compressors subject to the requirements of 40 CFR Part 60.482-3, excluding those compressors designated for no detectable emissions under the provisions of 40 CFR Part 60.482-3(i) and those compressors complying with 40 CFR Part 60.482-3(h).

3. [40 CFR Part 60.487(c)]
All semiannual reports to the Administrator shall include the following information, summarized from the information in 40 CFR Part 60.486:

   a. [40 CFR Part 60.487(c)(1)]
   Process unit identification.

   b. [40 CFR Part 60.487(c)(2)]
   For each month during the semiannual reporting period:

      i. [40 CFR Part 60.487(c)(2)(i)]
      Number of valves for which leaks were detected as described in 40 CFR Part 60.482(7)(b) or 40 CFR Part 60.483-2;

      ii. [40 CFR Part 60.487(c)(2)(ii)]

Number of valves for which leaks were not repaired as required in 40 CFR Part 60.482-7(d)(1);

iii. [40 CFR Part 60.487(c)(2)(iii)]
Number of pumps for which leaks were detected as described in 40 CFR Part 60.482-2(b) and (d)(6)(i);

iv. [40 CFR Part 60.487(c)(2)(iv)]
Number of pumps for which leaks were not repaired as required in 40 CFR Part 60.482-2(c)(1) and (d)(6)(ii);

v. [40 CFR Part 60.487(c)(2)(v)]
Number of compressors for which leaks were detected as described in 40 CFR Part 60.482-3(f);

vi. [40 CFR Part 60.487(c)(2)(vi)]
Number of compressors for which leaks were not repaired as required in 40 CFR Part 60.482-3(g)(1); and

vii. [40 CFR Part 60.487(c)(2)(vii)]
The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible.

c. [40 CFR Part 60.487(c)(3)]
Dates of process unit shutdowns which occurred within the semiannual reporting period.

d. [40 CFR Part 60.487(c)(4)]
Revisions to items reported according to paragraph (b) if changes have occurred since the initial report or subsequent revisions to the initial report.

4. [40 CFR Part 60.487(d)]
If the permittee elects to comply with the provisions of 40 CFR Parts 60.483-1 or 60.483-2 shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions.

5. [40 CFR Part 60.487(e)]
The permittee shall report the results of all performance tests in accordance with 40 CFR Part 60.8 of the General Provisions. The provisions of 40 CFR Part 60.8(d) do not apply to affected facilities subject to the provisions of this subpart except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests.

6. [40 CFR Part 60.487(f)]
The requirements of sections A.IV.4 through A.IV.6 remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of sections A.IV.4 through A.IV.6 provided that they comply with the requirements established by the State.

V. Testing Requirements

1. Compliance with the emission limitation(s) of this permit shall be determined in accordance with the following method(s):

   a. Emission Limitations:

   4.42 tpy of VOC (Vacuum Unit Tailgas - Emissions unit P013)
   1.77 tons VOC/yr.(Gas Con Debutanizer - Emissions unit P013)

   Applicable Compliance Method:

   This limit is for the fugitive organic compound emissions from valves, pumps/compressors, drains, relief valves and flanges associated with the Vacuum Unit Tail Gas Compressor System, the West Tank Farm Piping System and the Gas Con Fin Fan projects. Using emission factors from AP-42 Table 9.1-2 (10/80 edition) and taking into account emission reduction efficiency values taken from EPA-450/3- 81-015a, the emissions units should have annual emissions of less than the limits specified in section A.I.1. The emissions unit efficiency values are based on the fact that this equipment must meet the operational and monitoring/record keeping requirements of this permit.

VI. Miscellaneous Requirements

None

Emissions Unit ID: P013

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

V. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit consists of a Claus Sulfur Recovery Unit (SRU) in series with a SCOT unit, which is used to convert sulfur dioxide (SO2) to hydrogen sulfide (H2S) for further processing in the SRU. Acid gases from refinery processes are processed in the SRU to recover the sulfur. The SRU generates some SO2 which is treated in the same SCOT unit. The SCOT unit converts the SO2 from the SRU into H2S which is recycled back to the SRU. Both SRU's that are part of emissions units P011 and P016 discharge to either SCOT 1 or SCOT 2 unit which, in turn, vents to a thermal oxidizer for conversion of the residual H2S to SO2 prior to discharge into the ambient air. The thermal oxidizer is rated at 21 mmBtu/hr and burns only natural gas for fuel.	40 CFR Part 60, Subpart J	250 ppm of SO2 as a rolling, 12-hour average
	OAC rule 3745-31-05(A)(3) (PTI 15-0649)	8.66 lbs/hr of SO2 (when only P016 is in operation) 21.1 lbs/hr of SO2 (when both P011 and P016 are in operation) 37.9 tpy of SO2 The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart J.
	40 CFR 52.1881(b)(27)(ix)(D)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). See section A.I.2.a.
	40 CFR Part 63, Subpart UUU 40 CFR Part 63.1563(b)	See section A.I.2.b.
	40 CFR Part 63.1563(e)	See section A.I.2.c.
	40 CFR Part 63.1568(a)	See section A.I.2.d.
	40 CFR Part 63.1577	See section A.I.2.e.
	40 CFR Part 63.1569(a)	

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 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.d 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.e [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.f [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.].

2.g The permittee shall implement the enhancements to the program as outlined in Paragraph 21 of the global settlement agreement dated August 28, 2001 between Marathon Ashland Petroleum, LLC (MAP) and the United States of America(Civil NO. 01-40119). Although the enhsncements will terminate on December 31, 2008, MAP obtained release from civil liabilities associated with 40 CFR Part 60, Subparts A&J for projects and activities conducted prior to May 11, 2001.

II. Operational Restrictions

1. The permittee shall operate and maintain a flare system, in accordance with 40 CFR Part 63.11(b), for use during emergency or upset conditions experienced during the operation of the SRU.

2. 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.

3. [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 Record Keeping Requirements

1. The permittee shall continuously monitor and record SO2 and O2 emissions from emissions units P011 and P016. The permittee shall operate and maintain the existing monitoring and recording equipment to demonstrate compliance with the applicable standards. Monitoring data of SO2 emissions shall be expressed on a dry, oxygen-free basis. The continuous monitoring and recording equipment shall be operated and maintained in accordance with the requirements specified in 40 CFR Part 60.13.

2. The permittee shall maintain a statement of certification of the existing continuous SO2 and O2 monitoring systems on site. The certification 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 City of Canton Health Department, Division of Air Pollution Control upon request. The span values for this monitor are 500 ppm of SO2 and 10 percent O2. Methods 6 and 3 shall be used for conducting the relative accuracy evaluations.

3. The permittee shall maintain records of all data obtained by the continuous SO2 and O2 monitoring systems including, but not limited to, parts per million SO2 and O2, emissions of SO2 in units of the applicable standards in the appropriate averaging period (i.e., in ppm as a rolling, 12-hour average and in lbs/hr), results of daily zero/span calibration checks, and the magnitudes of manual calibration adjustments. The continuous monitoring and recording equipment shall be in continuous operation except for system breakdowns, repairs, calibration checks, and zero and span adjustments.

4. The permittee shall operate and maintain, in accordance with manufacturer's recommendations, flow measuring devices to quantify the emissions routed from the SRU to either emissions unit P003 or P004 (flares). Data collection shall commence with the activation of the relief valve and continue until the release has ceased. The type and specifications of flow measuring devices shall be subject to approval by the Canton City Health Department, Air Pollution Control Division upon request.

5. The permittee shall install, operate, and maintain an alarm system on the SRU which will immediately notify plant operators when a hydrogen sulfide venting situation develops. The alarm shall notify plant personnel that H2S is being vented to the flare. When an H2S venting event occurs, plant personnel shall notify the shift supervisor. Shift supervisors (or other plant personnel) shall take immediate action to eliminate the venting of H2S. The type and specifications of H2S alarm systems shall be subject to approval by the Canton City Health Department, Air Pollution Control Division upon request and shall be operated and maintained in accordance with the manufacturer's recommendations.

6. The permittee shall maintain daily records of the hours during which emissions units P011 and P016 operate simultaneously and the total number of operating hours for the SRU system.

7. Within 180 days of the effective date of this permit, the permittee shall develop or have developed 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 log of the records for the monitoring system dedicated to the continuous SO2 monitoring system must be kept on site and available for inspection during regular office hours.

8. 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(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.

9. [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 SO_2 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.

10. [63.1573] MONITORING ALTERNATIVES - 40 CFR Part 63, Subpart UUU

a. [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 a.i. through a.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.

b. [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).

c. [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 c.i. through c.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.

11. [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. 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 Canton City Health Department, Air Pollution Control Division 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 limits (250 ppm, 8.66 lbs/hr, and 21.1 lbs/hr). These reports shall also contain the total SO2 emissions for the calendar quarter (in tons). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

2. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Canton City Health Department, Air Pollution Control Division 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's operating time during the reporting period and the date, time, reason, and corrective actions 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.

3. The permittee shall notify the Canton City Health Department, Air Pollution Control Division as soon as possible of any H2S venting to the flare from this emissions unit during normal business hours. Hydrogen sulfide venting at all other times shall be reported to the Canton City Health Department, Air Pollution Control Division at the first opportunity during normal business hours. If the venting of H2S poses a health risk, the shift supervisor (or other plant personnel) on duty shall report the venting to the Ohio EPA emergency response division.

4. The permittee shall report any flow measurement data accumulated during the quarter from the flow measuring device used to quantify emissions routed from the SRU to the north flare (P003).

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.

5. [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 City of Canton Health Department, Division of Air Pollution Control 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 City of Canton Health Department, Division of Air Pollution Control 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 limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitations:

250 ppmv of SO2 as a rolling, 12-hour average
8.66 lbs/hr of SO2 (while operating only emissions unit P016)
21.1 lbs/hr of SO2 (while operating emissions units P011 and P016 simultaneously)

Applicable Compliance Method:

Compliance shall be demonstrated based upon the use of the SO2 continuous emission monitoring system (CEMS) as specified in section A.III.

If required, compliance shall also be demonstrated based upon the emission testing methods and procedures specified in section A.V.2.

b. Emission Limitation:

37.9 tpy of SO2

Applicable Compliance Method:

Compliance shall be demonstrated by summing the SO2 emission rate, in lbs/hr, from the CEMS for each hour of operation during the year, and then divide the total annual pounds of SO2 by 2000 lbs/ton.

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 the permit and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable hourly mass emission rates for SO2.

c. 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6 shall be employed to demonstrate compliance with the allowable mass emission rates for SO2. Alternative USEPA-approved test methods may be used with prior approval from the Canton City Health Department, Air Pollution Control Division.

d. The tests shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the Canton City Health Department, Air Pollution Control Division.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Canton City Health Department, Air Pollution Control Division. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit's operating parameters, the time(s) and dates of the tests and the persons who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the Canton City Health Department, Air Pollution Control Division's refusal to accept the results of the emission test.

Personnel from the Canton City Health Department, Air Pollution Control Division shall be permitted to witness the tests, 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 shall be signed by the person or persons responsible for the tests and submitted to the Canton City Health Department, Air Pollution Control Division within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Canton City Health Department, Air Pollution Control Division.

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.

[63.1568] 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)

$$C_{\mathbf{adj}} = C_{\mathbf{meas}} \, [20.9_c/(20.9 - \%O_2)]$$

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;
20.9_c = 20.9 percent oxygen—0.0 percent oxygen (defined oxygen correction basis), percent;
20.9 = oxygen concentration in air, percent;
$\%O_2$ = oxygen concentration measured on a dry basis, percent.

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 City of Canton Health Department, Division of Air Pollution Control 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.

4. [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 City of Canton Health Department, Division of Air Pollution Control 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.].

5. [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.

6. [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 City of Canton Health Department, Division of Air Pollution Control. 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 City of Canton Health Department, Division of Air Pollution Control.

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 City of Canton Health Department, Division of Air Pollution Control, 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. The following requirements of 40 CFR Part 63, Subpart UUU, apply from April 11, 2005 and onward. The following tables from 40 CFR Part 63, Subpart UUU are attached: Tables 29; 30; 31; 32; 33; 34; 35; 36; 37; 38; 39; 40; 41; 42; 43 and 44.

TABLE 29 TO Subpart UUU OF PART 63.—HAP EMISSION LIMITS FOR SULFUR RECOVERY UNITS
[As stated in § 63.1568(a)(1), you must meet each emission limitation in the following table that applies to you]

For * * *	You must meet this emission limit for each process vent * * *
1. Each new or existing Claus sulfur recovery unit part of a sulfur recovery plant of 20 long tons per day or more and subject to the NSPS for sulfur oxides in 40 CFR Part 60.104(a)(2).	a. 250 ppmv (dry basis) of SO_2 (SO_2) at zero percent excess air if you use an oxidation or reduction control system followed by incineration. b. 300 ppmv of reduced sulfur compounds calculated as ppmv SO_2 (dry basis) at zero percent excess air if you use a reduction control system without incineration.
2. Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2): Option 1 (Elect NSPS).	a. 250 ppmv (dry basis) of SO_2 at zero percent excess air if you use an oxidation or reduction control system followed by incineration. b. 300 ppmv of reduced sulfur compounds calculated as ppmv SO_2 (dry basis) at zero percent excess air if you use a reduction control system without incineration.
3. Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in paragraph (a)(2) of 40 CFR Part 60.104: Option 2 (TRS limit).	300 ppmv of total reduced sulfur (TRS) compounds, expressed as an equivalent SO_2 concentration (dry basis) at zero percent oxygen.

TABLE 30 TO Subpart UUU OF PART 63.—OPERATING LIMITS FOR HAP EMISSIONS FROM SULFUR RECOVERY UNITS
[As stated in § 63.1568(a)(2), you must meet each operating limit in the following table that applies to you]

For * * *	If use this type of control device	You must meet this operating limit* * *
1. Each new or existing Claus sulfur recovery unit part of a sulfur recovery plant of 20 long tons per day or more and subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2).	Not applicable	Not applicable.
2. Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2): Option 1 (Elect NSPS).	Not applicable	Not applicable.
3. Each new or existing sulfur recovery unit	Thermal incinerator	Maintain the daily average combustion zone

(Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR 60.104(a)(2): Option 2 (TRS limit).		temperature above the limit established during the performance test; and maintain the daily average oxygen concentration in the vent stream (percent, dry basis) above the limit established during the performance test.

TABLE 31 TO Subpart UUU OF PART 63.—CONTINUOUS MONITORING SYSTEMS FOR HAP EMISSIONS FROM SULFUR RECOVERY UNITS

[As stated in § 63.1568(b)(1), you must meet each requirement in the following table that applies to you]

For * * *	For this limit * * *	You must install and operate this continuous monitoring system * * *
1. Each new or existing Claus sulfur recovery unit part to a sulfur recovery plant of 20 long tons per day and subject to the NSPS for sulfur oxides in 40 CFR Part 60.104 (1) (2).	a. 250 ppmv (dry basis) of SO_2 at zero percent excess air if you use an oxidation or reduction control system followed by incineration.	Continuous emission monitoring system to measure and record the hourly average concentration of SO_2 (dry basis) at zero percent excess air for each exhaust stack. This system must include an oxygen monitor for correcting the data for excess air.
	b. 300 ppmv of reduced sulfur compounds calculated as ppmv SO_2 (dry basis) at zero percent excess air if you use a reduction control system without incineration.	Continuous emission monitoring system to measure and record the hourly average concentration of reduced sulfur and oxygen (O_2) emissions. Calculate the reduced sulfur emissions as SO_2 (dry basis) at zero percent excess air. *Exception:* You can use an instrument having an air or SO_2 dilution and oxidation system to convert the reduced sulfur to SO_2 for continuously monitoring and recording the concentration (dry basis) at zero percent excess air of the resultant SO_2 instead of the reduced sulfur monitor. The monitor must include an oxygen monitor for correcting the data for excess oxygen.
2. Option 1: Elect NSPS. Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in paragraph (a) (2) of 40 CFR 60.104.	a. 250 ppmv (dry basis) of SO_2 at zero percent excess air if you use an oxidation or reduction control system followed by incineration.	Continuous emission monitoring system to measure and record the hourly average concentration of SO_2 (dry basis), at zero percent excess air for each exhaust stack. This system must include an oxygen monitor for correcting the data for excess air.
	b. 300 ppmv of reduced sulfur compounds calculated as ppmv SO_2 (dry basis) at zero percent excess air if you use a reduction control system without incineration.	Continuous emission monitoring system to measure and record the hourly average concentration of reduced sulfur and O_2 emissions for each exhaust stack. Calculate the reduced sulfur emissions as SO_2 (dry basis), at zero percent excess air. *Exception:* You can use an instrument having an air or O_2 dilution and oxidation system to convert the reduced sulfur to SO_2 for continuously monitoring and recording the concentration (dry basis) at zero percent excess air of the resultant SO_2 instead of the reduced sulfur monitor. The monitor must include an oxygen monitor for correcting the data for excess oxygen.
3. Option 2: TRS limit Each new or existing sulfur recovery unit (Claus or Other type, regardless or size) not subject to the NSPS for sulfur oxides in 40 CFR Part 60.104 (a) (2).	300 ppmv of total reduced sulfur (TRS) compounds, expressed as an equivalent SO_2 concentration (dry basis) at zero percent oxygen.	Continuous emission monitoring system to measure and record the hourly average concentration of TRS for each exhaust stack. This monitor must include an oxygen monitor for correcting the data for excess oxygen; or continuous parameter monitoring systems to measure and record the combustion zone temperature of each thermal incinerator and the oxygen content (percent, dry basis) in the vent stream of the incinerator.

TABLE 32 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS FOR HAP EMISSIONS FROM SULFUR RECOVERY UNITS NOT SUBJECT TO THE NEW Emissions unit PERFORMANCE STANDARDS FOR SULFUR OXIDES

[As stated in § 63.1568(b)(2) and (3), you must meet each requirement in the following table that applies to you]

For * * *	You must * * *	Using * * *	According to these requirements * * *
1. Each new and existing sulfur recovery unit: Option 1 (Elect NSPS).	Measure SO_2 concentration (for an oxidation or reduction system followed by incineration) or the concentration of reduced sulfur (or SO_2 if you use an instrument to convert the reduced sulfur to SO_2) for a reduction control system without incineration.	Data from continuous emission monitoring system.	Collect SO_2 monitoring data every 15 minutes for 24 consecutive operating hours. Reduce the data to 1-hour averages computed from four or more data points equally spaced over each 1-hour period.
2. Each new and existing sulfur recovery unit: Option 2 (TRS limit).	a. Select sampling port's location and the number of traverse ports.	Method 1 or 1A Appendix A to part 60 of this chapter.	Sampling sites must be located at the outlet of the control device and prior to any releases to the atmosphere.
	b. Determine velocity and volumetric flow rate.	Method 2, 2A, 2C, 2D, 2F, or 2G in Appendix A to part 60 of this chapter, as applicable.	
	c. Conduct gas molecular weight analysis; obtain the oxygen concentration needed to correct the emission rate for excess air.	Method 3, 3A, or 3B in appendix A to part 60 of this chapter, as applicable.	Take the samples simultaneously with reduced sulfur or moisture samples.
	d. Measure moisture content of the stack gas.	Method 4 in Appendix A to part 60 of this chapter.	Make your sampling time for each Method 4 sample equal to that for 4 Method 15 samples.
	e. Measure the concentration of TRS.	Method 15 or 15A in Appendix A to part 60 of this chapter, as applicable.	If the cross-sectional area of the duct is less than 5 square meters (m^2) or 54 square feet, you must use the centroid of the cross section as the sampling point. If the cross-sectional area is 5 m^2 or more and the centroid is more than 1 meter (m) from the wall, your sampling point may be at a point no closer to the walls than 1 m or 39 inches. Your sampling rate must be at least 3 liters per minute or 0.10 cubic feet per minute to ensure minimum residence time for the sample inside the sample lines.
	f. Calculate the SO_2 equivalent for each run after correcting for moisture and oxygen.	The arithmetic average of the SO2 equivalent for each sample during the run.	
	g. Correct the reduced sulfur samples to zero percent excess air.	Equation 1 of § 63.1568.	
	h. Establish each operating limit in Table 30 of this subpart that applies to you.	Data from the continuous parameter monitoring system.	

(Continued on next page)

(Cont.) TABLE 32 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS FOR HAP EMISSIONS FROM SULFUR RECOVERY UNITS NOT SUBJECT TO THE NEW Emissions unit PERFORMANCE STANDARDS FOR SULFUR OXIDES
[As stated in § 63.1568(b)(2) and (3), you must meet each requirement in the following table that applies to you]

For * * *	You must * * *	Using * * *	According to these requirements * * *
	i. Measure thermal incinerator: combustion zone temperature.	Data from the continuous parameter monitoring system.	Collect temperature monitoring data every 15 minutes during the entire period of the performance test; and determine and record the minimum hourly average temperature from all the readings.
	j. Measure thermal incinerator: oxygen concentration (percent, dry basis) in the vent stream.	Data from the continuous parameter monitoring system.	Collect oxygen concentration (percent, dry basis) data every 15 minutes during the entire period of the performance test; and determine and record the minimum hourly average percent excess oxygen concentration.
	k. If you use a continuous emission monitoring system, measure TRS concentration.	Data from continuous emission monitoring system.	Collect TRS data every 15 minutes for 24 consecutive operating hours. Reduce the data to 1-hour averages computed from four or more data points equally spaced over each 1-hour period.

TABLE 33 TO Subpart UUU OF PART 63.—INITIAL COMPLIANCE WITH HAP EMISSION LIMITS FOR SULFUR RECOVERY UNITS
[As stated in § 63.1568(b)(5), you must meet each requirement in the following table that applies to you]

For * * *	For the following emission limit * * *	You have demonstrated initial compliance if * * *
1. Each new or existing Clause sulfur recovery unit part of a sulfur recovery plant of 20 long tons per day and subject to the NSPS for sulfur oxides in 40 CFR Part 60.104(a)(2).	a. 250 ppmv (dry basis) SO2 at zero percent excess air if you use an oxidation or reduction control system followed by incineration.	You have already conducted a performance test to demonstrate initial compliance with the NSPS and the hourly average SO2 emissions measured by the continuous emission monitoring system are less than or equal to 250 ppmv (dry basis) at zero percent excess air. As part of the Notification of Compliance Status, you must certify that your vent meets the SO2 limit. You are not required to do another performance test to demonstrate initial compliance. You have already conducted a performance evaluation to demonstrate initial compliance with the applicable performance specification. As part of your Notification of Compliance Status, you must certify that your continuous emission monitoring system meets the applicable requirements in § 63.1572. You are not required to do another performance evaluation to demonstrate initial compliance.
	b. 300 ppmv of reduced sulfur compounds calculated as ppmv SO2 (dry basis) at zero percent excess air if you use a reduction	You have already conducted a performance test to demonstrate initial compliance with the NSPS and the hourly average SO2 emissions measured by your continuous

	control system without incineration.	emission monitoring system are less than or equal to 250 ppmv (dry basis) at zero percent excess air. As part of the Notification of Compliance Status, you must certify that your vent meets the SO2 limit. You are not required to do another performance test do demonstrate initial compliance.
2. Option 1: Elect NSPS. Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR Part 60.104(a)(2).	a. 250 ppmv (dry basis) of SO2 at zero percent excess air if you use an oxidation control system followed by incineration.	You have already conducted a performance evaluation to demonstrate initial compliance with the applicable performance specification. As part of your Notification of Compliance Status, you must certify that your continuous emission monitoring system meets the applicable requirements in § 63.1572. You are not required to do another performance evaluation to demonstrate initial compliance. The hourly average SO2 emissions measured by the continuous emission monitoring system over the 24-hour period of the initial performance test are not more than 250 ppvm (dry basis) at zero percent excess air; and your performance evaluation shows the monitoring system meets the applicable requirements in § 63.1572.
	b. 300 ppmv of reduced sulfur compounds calculated as ppmv SO2 (dry basis) at zero percent excess air if you use a reduction control system without incineration.	The hourly average reduced sulfur emissions measured by the continuous emission monitoring system over the 24-hour period of the performance test no more than 300 ppmv, calculated as ppmv SO2 (dry basis) at zero percent excess air; and your performance evaluation shows the continuous emission monitoring system meets the applicable requirements in § 63.1572.

(Continued on next page)

(Cont.) TABLE 33 TO Subpart UUU OF PART 63.—INITIAL COMPLIANCE WITH HAP EMISSION LIMITS FOR SULFUR RECOVERY UNITS

[As stated in § 63.1568(b)(5), you must meet each requirement in the following table that applies to you]

For * * *	For the following emission limit * * *	You have demonstrated initial compliance if * * *
3. Option 2: TRS limit. Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR Part 60.104(a)(2).	300 ppmv of TRS compounds expressed as an equivalent SO_2 concentration (dry basis) at zero percent oxygen.	If you do not use a continuous emission monitoring system, the average TRS emissions measured using Method 15 over the period of the initial performance test are less than or equal to 300 ppmv expressed as equivalent SO2 concentration (dry basis) at zero percent oxygen. If you use a continuous emission monitoring system the hourly average TRS emissions measured by the continuous emission monitoring system over the 24-hour period of the performance test are no more than 300 ppmv expressed as an equivalent SO_2 concentration (dry basis) at zero percent oxygen; and your performance evaluation shows the continuous emission monitoring system meets the applicable requirements in § 63.1572.

TABLE 34 TO Subpart UUU OF PART 63.—CONTINUOUS COMPLIANCE WITH HAP EMISSION LIMITS FOR SULFUR

RECOVERY UNITS

[As stated in § 63.1568(c)(1), you must meet each requirement in the following table that applies to you.]

For * * *	For this emission limit * * *	You must demonstrate continuous compliance by * * *
1. Each new or existing Claus sulfur recovery unit part of a sulfur recovery plant of 20 long tons per or more and subject to the NSPS for sulfur oxides in 40 CFR Part 60.104(a)(2).	a. 250 ppmv (dry basis) SO2 at zero percent excess air if you use an oxidation or reduction control system followed by incineration.	Collecting the hourly average SO2 monitoring data (dry basis, percent excess air) according to § 63.1572; maintaining the hourly average SO2 concentration at or below the applicable limit; determining and recording each 12-hour average SO2 day concentration; and reporting any 12-hour average SO2 concentration greater than the applicable emission limitation in the compliance report required in § 63.1575.
	b. 300 ppmv of reduced sulfur compounds calculated as ppmv (dry basis) SO2 at zero percent excess air if you use a reduction control system without incineration.	Collecting the hourly average reduced sulfur and O2 data according to § 63.1572; and maintaining the hourly average concentration of reduced sulfur at or below the applicable limit; and determining and recording each 12-hour average concentration of reduced sulfur; and reporting any 12-hour average concentration of reduced sulfur greater than the applicable emission limitation in the compliance report required in § 63.1575.
2. Option 1: Elect NSPS Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR Part 60.104(a)(2).	a. 250 ppmv (dry basis) of SO2 at zero percent excess air (for oxidation or reduction system followed by incineration).	Collecting the hourly average SO2 monitoring data (dry basis, percent excess air) according to § 63.1572; maintaining the hourly average SO2 concentration at or below the applicable limit; determining and recording each 12-hour average SO2 concentration; and reporting any 12-hour average SO2 concentration greater than the applicable emission limitation in the compliance report required in § 63.1575.
	b. 300 ppmv of reduced sulfur compounds calculated as ppmv SO2 (dry basis) at zero percent excess air (for reduction control system without incineration).	Collecting the hourly average reduced sulfur (and air or O2 dilution and oxidation data) according to § 63.1572; maintaining the hourly average SO2 concentration at or below the applicable limit; reducing the monitoring data to 12-hour averages; and reporting any 12-hour average SO2 concentration greater than the applicable limit in the compliance report required by § 63.1575.
3. Option 2: TRS limit Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR Part 60.104(a)(2).	300 ppmv of TRS compounds, expressed as an SO2 concentration (dry basis) at zero percent oxygen or reduced sulfur compounds calculated as ppmv SO2 (dry basis) at zero percent excess air.	Collecting the hourly average TRS monitoring data according to § 63.1572, if you use a continuous emission monitoring system; maintaining the hourly average concentration of TRS at or below the applicable limit; reducing the TRS monitoring data to 12-hour averages; reporting any 12-hour average TRS greater than the applicable limit in the compliance report required by § 63.1575; and maintaining the hourly average concentration of TRS below the applicable limit if you use continuous parameter monitoring systems.

TABLE 35 TO Subpart UUU OF PART 63.—CONTINUOUS COMPLIANCE WITH OPERATING LIMITS FOR HAP EMISSIONS

FROM SULFUR RECOVERY UNITS

[As stated in § 63.1568(c)(1), you must meet each requirement in the following table that applies to you]

For * * *	For this operating limit * * *	You must demonstrate continuous compliance by * * *
1. Each new or existing Claus sulfur recovery unit part of a sulfur recovery plant of 20 long tons per day or more and subject to the NSPS for sulfur oxides in paragraph 40 CFR 60.104(a)(2).	Not applicable	Meeting the requirements of Table 34 of this subpart.
2. Option 1: Elect NSPS Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR Part 60.104(a)(2).	Not applicable	Meeting the requirements of Table 34 of this subpart.
3. Option 2: TRS limit Each new or existing sulfur recovery unit (Claus or other type, regardless of size) not subject to the NSPS for sulfur oxides in 40 CFR Part 60.104(a)(2)	a. Maintain the daily average combustion zone temperature above the level established during the performance test.	Collecting the hourly and daily average temperature monitoring data according to § 63.1572; and maintaining the daily average combustion zone temperature at or above the limit established during the performance test.
	b. The daily average oxygen concentration in the vent stream (percent, dry basis) must not fall below the level established during the performance test.	Collecting the hourly and daily average O_2 monitoring data according to § 63.1572; and maintaining the average O_2 concentration above the level established during the performance test.

TABLE 36 TO Subpart UUU OF PART 63.—WORK PRACTICE STANDARDS FOR HAP EMISSIONS FROM BYPASS LINES

[As stated in § 63.1569(a)(1), you must meet each work practice standard in the following table that applies to you]

Option	You must meet one of these equipment standards * * *
1. Option 1	Install and operate a device (including a flow indicator, level recorder, or electronic valve position monitor) to continuously detect, at least every hour, whether flow is present in the bypass line. Install the device at or as near as practical to the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere.
2. Option 2	Install a car-seal or lock-and-key device placed on the mechanism by which the bypass device flow position is controlled (e.g., valve handle, damper level) when the bypass device is in the closed position such that the bypass line valve cannot be opened without breaking the seal or removing the device.
3. Option 3	Seal the bypass line by installing a solid blind between piping flanges.
4. Option 4	Vent the bypass line to a control device that meets the appropriate requirements in this subpart.

TABLE 37 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR PERFORMANCE TESTS FOR BYPASS LINES
[As stated in § 63.1569(b)(1), you must meet each requirement in the following table that applies to you]

For this standard . . .	You must . . .
1. Option 1: Install and operate a flow indicator, level recorder, or electronic valve position monitor.	Record during the performance test for each type of control device whether the flow indicator, level recorder, or electronic valve position monitor was operating and whether flow was detected at any time during each hour of level the three runs comprising the performance test.

TABLE 38 TO Subpart UUU OF PART 63.—INITIAL COMPLIANCE WITH WORK PRACTICE STANDARDS FOR HAP EMISSIONS FROM BYPASS LINES
[As stated in § 63.1569(b)(2), you must meet each requirement in the following table that applies to you]

For * * *	For this work practice standard * * *	You have demonstrated initial compliance if * * *
1. Each new or existing bypass line associated with a catalytic cracking unit, catalytic reforming unit, or sulfur recovery unit.	a. Option 1: Install and operate a device (including a flow indicator, level recorder, or electronic valve position monitor) to continuously detect, at least every hour, whether flow is present in the bypass line. Install the device at or as near as practical to the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere.	The installed equipment operates properly during each run of the performance test and no flow is present in the line during the test.
	b. Option 2: Install a car-seal or lock-and-key device placed on the mechanism by which the bypass device flow position is controlled (e.g., valve handle, damper level) when the bypass device is in the closed position such that the bypass line valve cannot be opened without breaking the seal or removing the device.	As part of the notification of compliance status, you certify that you installed the equipment, the equipment was operational by your compliance date, and you identify what equipment was installed.
	c. Option 3: Seal the bypass line by installing a solid blind between piping flanges.	See item 1.b. of this table.
	d. Option 4: Vent the bypass line to a control device that meets the appropriate requirements in this subpart.	See item 1.b. of this table.

TABLE 39 TO Subpart UUU OF PART 63.—CONTINUOUS COMPLIANCE WITH WORK PRACTICE STANDARDS FOR HAP EMISSIONS FROM BYPASS LINES
[As stated in § 63.1569(c)(1), you must meet each requirement in the following table that applies to you]

If you elect this standard * * *	You must demonstrate continuous compliance by * * *
1. Option 1: Flow indicator, level recorder, or electronic valve position monitor.	Continuously monitoring and recording whether flow is present in the bypass line; visually inspecting the device at least once every hour if the device is not equipped with a recording system that provides a continuous record; and recording whether the device is operating properly and whether flow is present in the bypass line.
2. Option 2: Car-seal or lock-and-key device	Visually inspecting the seal or closure mechanism at least once every month; and recording whether the bypass line valve is maintained in the closed position and whether flow is present in the line.
3. Option 3: Solid blind flange	Visually inspecting the blind at least once a month; and recording whether the blind is maintained in the correct position such that the vent stream cannot be diverted through the bypass line.

4. Option 4: Vent to control device	Monitoring the control device according to appropriate subpart requirements.
5. Option 1, 2, 3, or 4	Recording and reporting the time and duration of any bypass.

TABLE 40 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR INSTALLATION, OPERATION, AND MAINTENANCE OF CONTINUOUS OPACITY MONITORING SYSTEMS AND CONTINUOUS EMISSION MONITORING SYSTEMS

[As stated in § 63.1572(a)(1) and (b)(1), you must meet each requirement in the following table that applies to you]

This type of continuous opacity or emission monitoring system * * *	Must meet these requirements * * *
1. Continuous opacity monitoring system	Performance specification 1 (40 CFR Part 60, appendix B).
2. CO continuous emission monitoring system	Performance specification 4 (40 CFR Part 60, appendix B); span value of 1,000 ppm; and procedure 1 (40 CFR Part 60, appendix F) except relative accuracy test audits are required annually instead of quarterly.
3. CO continuous emission monitoring system used to demonstrate emissions average under 50 ppm (dry basis).	Performance specification 4 (40 CFR Part 60, appendix B); and span value of 100 ppm.
4. SO_2 continuous emission monitoring for sulfur recovery unit with oxidation control system or reduction control system; this monitor must include an O_2 monitor for correcting the data for excess air.	Performance specification 2 (40 CFR Part 60, appendix B); span values of 500 ppm SO_2 and 10 percent O_2; use Methods 6 or 6C and 3A or 3B (40 CFR Part 60, Appendix A) for certifying O_2 monitor; and procedure 1 (40 CFR Part 60, appendix F) except relative accuracy test audits are required annually instead of quarterly.
5. Reduced sulfur and O_2 continuous emission monitoring system for sulfur recovery unit with reduction control system not followed by incineration; this monitor must include an O_2 monitor for correcting the data for excess air unless exempted.	Performance specification 5 (40 CFR Part 60, appendix B), except calibration drift specification is 2.5 percent of the span value instead of 5 percent; 450 ppm reduced sulfur and 10 percent O_2; use Methods 15 or 15A and 3A or 3B (40 CFR Part 60, Appendix A) for certifying O_2 monitor; if Method 3A or 3B yields O_2 concentrations below 0.25 percent during the performance evaluation, the O_2 concentration can be assumed to be zero and the O_2 monitor is not required; and procedure 1 (40 CFR Part 60, appendix F), except relative accuracy test audits, are required annually instead of quarterly.
6. Instrument with an air or O2 dilution and oxidation system to convert reduced sulfur to SO_2 for continuously monitoring the concentration of SO_2 instead of reduced sulfur monitor and O_2 monitor.	Performance specification 5 (40 CFR Part 60, appendix B); span value of 375 ppm SO_2 and 10 percent O_2; use Methods 15 or 15A and 3A or 3B for certifying O_2 monitor; and procedure 1 (40 CFR Part 60, appendix F), except relative accuracy test audits, are required annually instead of quarterly.
7. TRS continuous emission monitoring system for sulfur recovery unit; this monitor must include an O_2 monitor for correcting the data for excess air.	Performance specification 5 (40 CFR Part 60, appendix B).
8. O_2 monitor for oxygen concentration	If necessary due to interferences, locate the oxygen sensor prior to the introduction of any outside gas stream; performance specification 3 (40 CFR Part 60, appendix B; span value for O_2 sensor is 10 percent; and procedure 1 (40 CFR Part 60, appendix F), except relative accuracy test audits, are required annually instead of quarterly.

TABLE 41 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR INSTALLATION, OPERATION, AND MAINTENANCE OF CONTINUOUS PARAMETER MONITORING SYSTEMS—Continued

[As stated in § 63.1572(c)(1), you must meet each requirement in the following table that applies to you]

If you use a continuous parameter monitoring system to measure and record * * *	You must * * *
1. Voltage and secondary current or total power input.	At least monthly, inspect all components of the continuous parameter monitoring system for integrity and all electrical connections for continuity; and record the results of each inspection.

2. Pressure drop [1]	Locate the pressure sensor(s) in a position that provides a representative measurement of the pressure; minimize or eliminate pulsating pressure, vibration, and internal and external corrosion; use a gauge with an accuracy ± 2 percent over the operating range; check pressure tap for plugs at least once a week; using a manometer, check gauge calibration quarterly and transducer calibration monthly; for a semi-regenerative catalytic reforming unit, you can check the calibration quarterly and monthly or prior to regeneration, whichever is longer; record the results of each calibration; conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range, or install a new pressure sensor; at least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage; and record the results of each inspection.
3. Air flow rate, gas flow rate, or total water (or scrubbing liquid) flow rate.	Locate the flow sensor(s) and other necessary equipment such as straightening vanes in a position that provides representative flow; use a flow rate sensor with an accuracy within ±5 percent; reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances; conduct a flow sensor calibration check at least semiannually; for a semi-regenerative catalytic reforming unit, you can check the calibration at least semiannually or prior to regeneration, whichever is longer; record the results of each calibration; if you elect to comply with Option 3 (Ni lb/hr) or Option 4 (Ni lb/1,000 lbs of coke burn-off) for the HAP metal emission limitations in § 63.1564, install the continuous parameter monitoring system for gas flow rate as close as practical to the continuous opacity monitoring system; and if you don't use a continuous opacity monitoring system, install the continuous parameter monitoring system for gas flow rate as close as practical to the control device.
4. Combustion zone temperature	Install the temperature sensor in the combustion zone or in the ductwork immediately downstream of the combustion zone before any substantial heat exchange occurs; locate the temperature sensor in a position that provides a representative temperature; use a temperature sensor with an accuracy of ±1 percent of the temperature being measured, expressed in degrees Celsius (C) or ±0.5 degrees C, whichever is greater; shield the temperature sensor system from electromagnetic interference and chemical contaminants; if you use a chart recorder, it must have a sensitivity in the minor division of at least 20 degrees Fahrenheit; perform an electronic calibration at least semiannually according to the procedures in the manufacturer's owners manual; following the electronic calibration, conduct a temperature sensor validation check, in which a second or redundant temperature sensor placed nearby the process temperature sensor must yield a reading within 16.7 degrees C of the process temperature sensor's reading; record the results of each calibration and validation check; conduct calibration and validation checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range, or install a new temperature sensor; and at least monthly, inspect all components for integrity and all electrical connections for continuity, oxidation, and galvanic corrosion.
5. pH	Locate the pH sensor in a position that provides a representative measurement of pH; ensure the sample is properly mixed and representative of the fluid to be measured; check the pH meter's calibration on at least two points every 8 hours of process operation; at least monthly, inspect all components for integrity and all electrical components for continuity; record the results of each inspection; and if you use pH strips to measure the pH of the water exiting a wet scrubber as an alternative to a continuous parameter monitoring system, you must use pH strips with an accuracy of ±10 percent.
6. HCl concentration	Use a colormetric tube sampling system with a printed numerical scale in ppmv, a standard measurement range of 1 to 10 ppmv (or 1 to 30 ppmv if applicable), and a standard deviation for measured values of no more than ±15 percent. System must include a gas detection pump and hot air probe if needed for the measurement range.

TABLE 42 TO Subpart UUU OF PART 63.—ADDITIONAL INFORMATION FOR INITIAL NOTIFICATION OF COMPLIANCE STATUS

[As stated in § 63.1574(d), you must meet each requirement in the following table that applies to you]

For * * *	You must provide this additional information * * *
1. Identification of affected emissions units and emission points.	Nature, size, design, method of operation, operating design capacity of each affected emissions unit; identify each emission point for each HAP; identify any affected emissions unit or vent associated with an affected emissions unit not subject to the requirements of Subpart UUU.
2. Initial compliance	Identification of each emission limitation you will meet for each affected emissions unit, including any option you select (i.e., NSPS, PM or Ni, flare, percent reduction, concentration, options for bypass lines); if applicable, certification that you have already conducted a performance test to demonstrate initial compliance with the NSPS for an affected emissions unit; certification that the vents meet the applicable emission limit and the continuous opacity or that the emission monitoring system meets the applicable performance specification; if applicable, certification that you have installed and verified the operational status of equipment by your compliance date for each bypass line that meets the requirements of Option 2, 3, or 4 in § 63.1569 and what equipment you installed; identification of the operating limit for each affected emissions unit, including supporting documentation; if your affected emissions unit is subject to the NSPS, certification of compliance with NSPS emission limitations and performance specifications; a brief description of performance test conditions (capacity, feed quality, catalyst, etc.); an engineering assessment (if applicable); and if applicable, the flare design (e.g., steam-assisted, air-assisted, or non-assisted), all visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the Method 22 test.
3. Continuous compliance	Each monitoring option you elect; and identification of any unit or vent for which monitoring is not required; and the definition of ‘‘operating day.’’ (This definition, subject to approval by the applicable permitting authority, must specify the times at which a 24-hr operating day begins and ends.)

TABLE 43 TO Subpart UUU OF PART 63.—REQUIREMENTS FOR REPORTS
[As stated in § 63.1575(a), you must meet each requirement in the following table that applies to you]

You must submit a(n) * * *	The report must contain * * *	You must submit the report * * *
1. Compliance report	If there are not deviations from any emission limitation or work practice standard that applies to you, a statement that there were no deviations from the standards during the reporting period and that no continuous opacity monitoring system or continuous emission monitoring system was inoperative, inactive, out-of-control, repaired, or adjusted; and if you have a deviation from any emission limitation or work practice standard during the reporting period, the report must contain the information in § 63.1575(d) or (e)	Semiannually according to the requirements in § 63.1575(b).

Table 44 to Subpart UUU of Part 63 - Applicability of NESHAP General Provisions to Subpart UUU
As stated in §63.1577, you must meet each requirement in the following table that applies to you.

Citation	Subject	Applies to Subpart UUU	Explanation
§63.1	Applicability	Yes	Except that Subpart UUU specifies calendar or operating day.
§63.2	Definitions	Yes	
§63.3	Units and Abbreviations	Yes	
§63.4	Prohibited Activities	Yes	
§63.5(a)-(c)	Construction and Reconstruction	Yes	In §63.5(b)(4), replace the reference to §63.9 with §63.9(b)(4) and (5).
§63.5(d)(1)(i)	Application for Approval of Construction or Reconstruction - General Application Requirements	Yes	Except, Subpart UUU specifies the application is submitted as soon as practicable before startup but no later than 90 days (rather than 60) after the promulgation date where construction or reconstruction had commenced and initial startup had not occurred before promulgation.
§63.5(d)(1)(ii)		Yes	Except that emission estimates specified in §63.5(d)(1)(ii)(H) are not required.
§63.5(d)(1)(iii)		No	Subpart UUU specifies submission of notification of compliance status.
§63.5(d)(2)		No	
§63.5(d)(3)		Yes	Except that §63.5(d)(3)(ii) does not apply.
§63.5(d)(4)		Yes	
§63.5(e)	Approval of Construction or Reconstruction	Yes	
§63.5(f)(1)	Approval of Construction or Reconstruction Based on State Review	Yes	

§63.5(f)(2)		Yes	Except that 60 days is changed to 90 days and cross-reference to §63.9(b)(2) does not apply.
§63.6(a)	Compliance with Standards and Maintenance - Applicability	Yes	
§63.6(b)(1)-(4)	Compliance Dates for New and Reconstructed Emissions units	Yes	
§63.6(b)(5)		Yes	Except that Subpart UUU specifies different compliance dates for emissions units.
§63.6(b)(6)	[Reserved]	Not appli-cable	
§63.6(b)(7)	Compliance Dates for New and Reconstructed Area Emissions units That Become Major	Yes	
§63.6(c)(1)-(2)	Compliance Dates for Existing Emissions units	Yes	Except that Subpart UUU specifies different compliance dates for emissions units subject to Tier II gasoline sulfur control requirements.
§63.6(c)(3)-(4)	[Reserved]	Not appli-cable	
§63.6(c)(5)	Compliance Dates for Existing Area Emissions units That Become Major	Yes	
§63.6(d)	[Reserved]	Not appli-cable	
§63.6(e)(1)-(2)	Operation and Maintenance Requirements	Yes	
§63.6(e)(3)(i)-(iii)	Startup, Shutdown, and Malfunction Plan	Yes	
§63.6(e)(3)(iv)		Yes	Except that reports of actions not consistent with plan are not required within 2 and 7 days of action but rather must be included in next periodic report.
§63.6(e)(3)(v)-(viii)		Yes	The owner or operator is only required to keep the latest version of the plan.
§63.6(f)(1)-(2)(iii)(C)	Compliance with Emission Standards	Yes	
§63.6(f)(2)(iii)(D)		No	
§63.6(f)(2)(iv)-(v)		Yes	
§63.6(f)(3)		Yes	
§63.6(g)	Alternative Standard	Yes	
§63.6(h)	Opacity/VE Standards	Yes	
§63.6(h)(2)(i)	Determining Compliance with Opacity/VE Standards	No	Subpart UUU specifies methods.

§63.6(h)(2)(ii)	[Reserved]	Not appli-cable	
§63.6(h)(2)(iii)		Yes	
§63.6(h)(3)	[Reserved]	Not appli-cable	
§63.6(h)(4)	Notification of Opacity/VE Observation Date	Yes	Applies to Method 22 tests.
§63.6(h)(5)	Conducting Opacity/VE Observations	No	
§63.6(h)(6)	Records of Conditions During Opacity/VE Observations	Yes	Applies to Method 22 observations.
§63.6(h)(7)(i)	Report COM Monitoring Data from Performance Test	Yes	
§63.6(h)(7)(ii)	Using COM Instead of Method 9	No	
§63.6(h)(7)(iii)	Averaging Time for COM during Performance Test	Yes	
§63.6(h)(7)(iv)	COM Requirements	Yes	
§63.6(h)(8)	Determining Compliance with Opacity/VE Standards	Yes	
§63.6(h)(9)	Adjusted Opacity Standard	Yes	
§63.6(i)(1)-(14)	Extension of Compliance	Yes	Not applicable to an affected emissions unit with Tier II compliance date. May be applicable to an affected emissions unit exempt from Tier II rule.
§63.6(i)(15)	[Reserved]	Not appli-cable	
§63.6(i)(16)		Yes	
§63.6(j)	Presidential Compliance Exemption	Yes	
§63.7(a)(1)	Performance Test Requirements-Applicability	Yes	Except that Subpart UUU specifies the applicable test and demonstration procedures.
§63.7(a)(2)	Performance Test Dates	No	Test results must be submitted in the Notification of Compliance Status report due 150 days after the compliance date.
§63.7(a)(3)	Section 114 Authority	Yes	
§63.7(b)	Notifications	Yes	Except that Subpart UUU specifies notification at least 30 days prior to the scheduled test date rather than 60 days.
§63.7(c)	Quality Assurance Program/Site-Specific Test Plan	Yes	
§63.7(d)	Performance Test Facilities	Yes	
§63.7(e)	Conduct of Tests	Yes	
§63.7(f)	Alternative Test Method	Yes	

§63.7(g)	Data Analysis, RECORD KEEPING, Reporting	Yes	Except performance test reports must be submitted with notification of compliance status due 150 days after the compliance date.
§63.7(h)	Waiver of Tests	Yes	
§63.8(a)(1)	Monitoring Requirements - Applicability	Yes	
§63.8(a)(2)	Performance Specifications	Yes	
§63.8(a)(3)	[Reserved]	Not appli-cable	
§63.8(a)(4)	Monitoring with Flares	Yes	
§63.8(b)(1)	Conduct of Monitoring	Yes	
§63.8(b)(2)-(3)	Multiple Effluents and Multiple Monitoring Systems	Yes	Subpart UUU specifies the required monitoring locations.
§63.8(c)(1)	Monitoring System Operation and Maintenance	Yes	
§63.8(c)(1)(i)-(ii)	Startup, Shutdown, and Malfunctions	Yes	Except that Subpart UUU specifies that reports are not required if actions are consistent with the SSM plan, unless requested by the permitting authority. If actions are not consistent, actions must be described in next compliance report.
§63.8(c)(1)(iii)	Compliance with Operation and Maintenance Requirements	Yes	
§63.8(c)(2)-(3)	Monitoring System Installation	Yes	Except that Subpart UUU specifies that for continuous parameter monitoring systems, operational status verification includes completion of manufacturer written specifications or installation operation, and calibration of the system or other written procedures that provide adequate assurance that the equipment will monitor accurately.
§63.8(c)(4)	Continuous Monitoring System Requirements	No	Subpart UUU specifies operational requirements.
§63.8(c)(4)(i)-(ii)	Continuous Monitoring System Requirements	Yes	Except that these requirements apply only to a continuous opacity monitoring system or a continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or SO_2 limits.
§63.8(c)(5)	COM Minimum Procedures	Yes	
§63.8(c)(6)	CMS Requirements	No	Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or SO_2 limits.
§63.8(c)(7)-(8)	CMS Requirements	Yes	

§63.8(d)	Quality Control Program	Yes	Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or SO_2 limits.
§63.8(e)	CMS Performance Evaluation	Yes	Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or SO_2 limits. Results are to be submitted as part of the Notification of Compliance Status due 150 days after the compliance date.
§63.8(f)(1)-(5)	Alternative Monitoring Method	Yes	Except that Subpart UUU specifies procedures for requesting alternative monitoring systems and alternative parameters.
§63.8(f)(6)	Alternative to Relative Accuracy Test	Yes	Applicable to continuous emission monitoring systems if performance specification requires a relative accuracy test audit.
§63.8(g)(1)-(4)	Reduction of Monitoring Data	Yes	Applies to a continuous opacity monitoring system or continuous emission monitoring system.
§63.8(g)(5)	Data Reduction	No	Subpart UUU specifies requirements.
§63.9(a)	Notification Requirements - Applicability	Yes	Duplicate Notification of Compliance Status report to the Regional Administrator may be required.
§63.9(b)(1)-(5)	Initial Notifications	Yes	Except that notification of construction or reconstruction is to be submitted as soon as practicable before startup but no later than 30 days (rather than 60 days) after the effective date if construction or reconstruction had commenced but startup had not occurred before the effective date.
§63.9(c)	Request for Extension of Compliance	Yes	
§63.9(d)	New Emissions unit Notification for Special Compliance Requirements	Yes	
§63.9(e)	Notification of Performance Test	Yes	Except that notification is required at least 30 days before test.
§63.9(f)	Notification of VE/Opacity Test	Yes	

§63.9(g)	Additional Notification Requirements for Emissions units with Continuous Monitoring Systems	Yes	Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or SO_2 limits.
§63.9(h)	Notification of Compliance Status	Yes	Except that Subpart UUU specifies the notification is due no later than 150 days after compliance date.
§63.9(i)	Adjustment of Deadlines	Yes	
§63.9(j)	Change in Previous Information	Yes	
§63.10(a)	RECORD KEEPING and Reporting-Applicability	Yes	
§63.10(b)	Records	Yes	Except that §63.10(b)(2)(xiii) applies if you use a continuous emission monitoring system to meet the NSPS or you elect to meet the NSPS, CO, or SO_2 reduced sulfur limit and the performance evaluation requires a relative accuracy test audit.
§63.10(c)(1)-(6), (9)-(15)	Additional Records for Continuous Monitoring Systems	Yes	Except that these requirements apply if you use a continuous opacity monitoring system or a continuous emission monitoring system to meet the NSPS or elect to meet the NSPS opacity, CO, or SO_2 limits.
§63.10(c)(7)-(8)	Records of Excess Emissions and Exceedances	No	Subpart UUU specifies requirements.
§63.10(d)(1)	General Reporting Requirements	Yes	
§63.10(d)(2)	Performance Test Results	No	Subpart UUU requires performance test results to be reported as part of the Notification of Compliance Status due 150 days after the compliance date.
§63.10(d)(3)	Opacity or VE Observations	Yes	
§63.10(d)(4)	Progress Reports	Yes	
§63.10(d)(5)(i)	Startup, Shutdown, and Malfunction Reports	Yes	Except that reports are not required if actions are consistent with the SSM plan, unless requested by permitting authority.
§63.10(d)(5)(ii)		Yes	Except that actions taken during a startup, shut- down, or malfunction that are not consistent with the plan do not need to be reported within 2 and 7 days of commencing and completing the action, respectively, but must be included in the next periodic report.

§63.10(e)(1)-(2)	Additional CMS Reports	Yes	Except that these requirements apply only to a continuous opacity monitoring system or continuous emission monitoring system if you are subject to the NSPS or elect to comply with the NSPS opacity, CO, or SO_2 limits. Reports of performance evaluations must be submitted in Notification of Compliance Status.
§63.10(e)(3)	Excess Emissions/CMS Performance Reports	No	Subpart UUU specifies the applicable requirements.
§63.10(e)(4)	COMS Data Reports	Yes	
§63.10(f)	RECORD KEEPING/ Reporting Waiver	Yes	
§63.11	Control Device Requirements	Yes	Applicable to flares.
§63.13	Addresses	Yes	
§63.14	Incorporation by Reference	Yes	
§63.15	Availability of Information	Yes	

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit consists of a Claus Sulfur Recovery Unit (SRU) in series with a SCOT unit, which is used to convert sulfur dioxide (SO2) to hydrogen sulfide (H2S) for further processing in the SRU. Acid gases from refinery processes are processed in the SRU to recover the sulfur. The SRU generates some SO2 which is treated in the same SCOT unit. The SCOT unit converts the SO2 from the SRU into H2S which is recycled back to the SRU. Both SRU's that are part of emissions units P011 and P016 discharge to either SCOT 1 or SCOT 2 unit which, in turn, vents to a thermal oxidizer for conversion of the residual H2S to SO2 prior to discharge into the ambient air. The thermal oxidizer is rated at 21 mmBtu/hr and burns only natural gas for fuel.	OAC rule 3745-18-82(E)	2.0 pounds of SO2 per 100 pounds of sulfur processed

2. **Additional Terms and Conditions**

2.a 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 This SO2 emission limitation is less stringent than the BAT requirements in section A.I.1 of this permit; however, because the units of this emission limitation are different than the units for the BAT requirements, monitoring, record keeping, and reporting requirements are specified below to ensure ongoing compliance with this emission limitation.

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

1. The permittee shall operate and maintain existing equipment to continuously monitor and record the SO_2 emissions from this emissions unit in units of the applicable standard(s). Such continuous monitoring and recording equipment shall operate in accordance with the requirements specified in 40 CFR Part 60.13.

2. 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 B.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.

3. The permittee shall maintain a written quality assurance/quality control plan for the continuous SO_2 monitoring system designed to ensure continuous valid and representative readings of SO_2. 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 SO_2 monitoring system must be kept on site and available for inspection during regular office hours.

4. Although the permittee is not subject to the provisions of 40 CFR Part 60, Appendix F, the Director of Ohio EPA has determined in accordance with ORC 3704.03(I), that the permittee must operate and maintain the CEMS for the SRU in accordance with 40 CFR Part 60, Appendix F in order to provide valid readings of SO_2 emissions on a continuous basis.

5. [40 CFR Part 60, Appendix F]
   The permittee shall check, record and quantify the calibration drift at two concentration values at least once daily according to Section 4 of 40 CFR Part 60, Appendix F, Procedure 1.

6. [40 CFR Part 60, Appendix F]
   The permittee shall comply with the Excessive Audit Inaccuracy requirements under section 5.2 of 40 CFR Part 60, Appendix F, Procedure 1.

IV. Reporting Requirements

1. The permittee shall submit reports within 30 days following the end of each calendar quarter to the Canton local air agecy documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of SO_2 values in excess of the applicable limit specified in OAC rule 3745-18-54(O)(9), including any bypassing of the amine-claus SRU to the refinery flare system. These reports shall also contain the total SO_2 emissions and total noncomplying SO_2 emissions for the calendar quarter (in tons).

   The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate EPA District Office or local air agency documenting any continuous SO_2 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.

   If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

2. [40 CFR Part 60, Appendix F; Procedure 1, Section 7]
   The permittee shall submit a quarterly report for each CEMS, the accuracy results from Section 6 of 40 CFR Part 60, Appendix F and the CD assessment results from Section 4 of 40 CFR Part 60, Appendix F. Report the drift and accuracy information as a Data Assessment Report (DAR), and include one copy of this DAR for each quarterly audit with the report of emissions required under the applicable subparts of this part. As a minimum, the DAR must contain the information required by Section 7 of 40 CFR Part 60, Appendix F.

V. Testing Requirements

1. Compliance with the emission limitation in section B.I.1 of these terms and conditions shall be determined in accordance with the following method:

   Emission Limitation:

   2.0 pounds of SO_2 per 100 pounds of sulfur processed

   Applicable Compliance Method:

   The test methods and procedures used for determining compliance with this emission limit are those specified in OAC rule 3745-18-04(B). The test for this emission limitation shall be done at the same time as the RATA test [see section A.V.] as long as the CEMS is used for compliance purposes. Compliance shall also be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.

2. Each CEMS must be audited at least once each calendar quarter. Successive quarterly audits shall occur no closer than 2 months. The audits shall be conducted as follows:

   a. Relative Accuracy Test Audit (RATA). The RATA must be conducted at least once every four calendar quarters. Conduct the RATA as described for the RA test procedure in the applicable PS in appendix B (e.g., PS 2 for SO_2 and NO_X). In addition, analyze the appropriate performance audit samples received from EPA as described in the applicable sampling methods (e.g., Methods 6 and 7).

   b. Cylinder Gas Audit (CGA). If applicable, a CGA may be conducted in accordance with Section 5.1.2 of 40 CFR Part 60, Appendix F, Procedure 1 in three of four calendar quarters, but in no more than three quarters in succession.

   c. Relative Accuracy Audit (RAA). The RAA may be conducted three of four calendar quarters, but in no more than three quarters in succession. To conduct a RAA, follow the procedure described in the applicable PS in appendix B for the relative accuracy test, except only three sets of measurement data are required. Analyses of EPA performance audit samples are also required.

VI. Miscellaneous Requirements

1. Continuous SO_2 Monitoring - Certified Systems Statement of Certification
   A statement of certification of the existing continuous SO_2 monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 6. Proof of certification shall be made available to the City of Canton Health Department, Division of Air Pollution Control upon request.

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a 2,100,000-gallon crude oil storage vessel identified as tank number 40 (emissions unit T023). It is classified as a Group 2 storage vessel pursuant to 40 CFR Part 63.641 (Subpart CC).	40 CFR Part 63.641, Subpart CC	See section A.I.2.a.
	OAC rule 3745-21-09(L)	See section A.I.2.b

2. Additional Terms and Conditions

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46,763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute after the date specified in paragraph (C)(11) of OAC rule 3745-21-04 unless such tank, is designed or equipped as follows:

i. Vapor control equipment which is one of the following:

(a) Internal floating roof; or
(b) Alternative equivalent control for VOC emissions as may be approved by the director.

II. Operational Restrictions

1. If equipped with an internal floating roof, the automatic bleeder vents are to 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, are to be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

2. All openings, except stub drains, are to equipped with a cover, seal, or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

3. Other means for reducing the emission of VOC into the ambient air as may be required by the director.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. All records shall be retained for as long as the storage vessel remains in operation or there is a change in the vessel's group category. Records shall be maintained in a manner that they can be readily accessible. Records may be maintained in a hard copy format or in computer-readable format.

IV. Reporting Requirements

1. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Canton City Health Department, Air Pollution Control Division at least thirty (30) days prior to such a change in the storage vessel's group designation.

2. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia and the tank does not comply with the terms and conditions specified in section A.I.2.b. Each deviation report shall be submitted to the Canton City Health Department, Air Pollution Control Division within 30 days of becoming aware of the occurrence.

V. Testing Requirements

1. Compliance with the applicable emission control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

   a. Emission Limitation:

      The permittee shall operate this emissions unit as a Group 2 storage vessel.

      Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1.

b. Emission Limitation:

No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute after the date specified in paragraph (C)(11) of OAC rule 3745-21-04 unless such tank, is designed or equipped as follows:

i. Vapor control equipment which is one of the following:

(a) Internal floating roof; or
(b) Alternative equivalent control for VOC emissions as may be approved by the director.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a 2,100,000-gallon storage tank for the storage of crude oil. The tank is identified as tank number 45 (emissions unit T024). It has an internal floating roof. The emissions unit currently operates as a Group 2 storage vessel under the refinery MACT (Subpart CC). The crude oil stored in this emissions unit has a HAP concentration of less than 4 %.	40 CFR Part 63.641, Subpart CC	See section A.I.2.a.
	OAC rule 3745-21-09(L)	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46,763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute after the date specified in paragraph (C)(11) of OAC rule 3745-21-04 unless such tank, is designed or equipped as follows:

(i) Vapor control equipment which is one of the following:

(a) Internal floating roof; or
(b) Alternative equivalent control for VOC emissions as may be approved by the director.

2.c The concentration of total Hazardous Air Pollutants(HAPs) of the liquid stored in this emissions unit shall not exceed four percent (4 %) by weight.

II. Operational Restrictions

1. If equipped with an internal floating roof, the automatic bleeder vents are to 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, are to be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

2. All openings, except stub drains, are to equipped with a cover, seal, or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

3. Other means for reducing the emission of VOC into the ambient air as may be required by the director.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. All records shall be retained for as long as the storage vessel remains in operation or there is a change in the vessel's group category. Records shall be maintained in a manner that they can be readily accessible. Records may be maintained in a hard copy format or in computer-readable format.

IV. Reporting Requirements

1. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Canton City Health Department, Air Pollution Control Division at least thirty (30) days prior to such a change in the storage vessel's group designation.

2. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia and the tank does not comply with the terms and conditions specified in section A.I.2.b. Each deviation report shall be submitted to the Canton City Health Department, Air Pollution Control Division within 30 days of becoming aware of the occurrence.

V. Testing Requirements

1. Compliance with the applicable emission control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

a. Emission Limitation:

The permittee shall operate this emissions unit as a Group 2 storage vessel.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1.

b. Emission Limitation:

No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute after the date specified in paragraph (C)(11) of OAC rule 3745-21-04 unless such tank, is designed or equipped as follows:

i. Vapor control equipment which is one of the following:

(a) Internal floating roof; or
(b) Alternative equivalent control for VOC emissions as may be approved by the director.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a 2,284,380-gallon storage tank for the storage of petroleum liquids. The tank is identified as tank number 50 (emissions unit T028). It has an internal floating roof. The emissions unit currently operates as a Group 1 storage vessel under the refinery MACT (Subpart CC).	40 CFR Part 63, Subpart CC (MACT) OAC rule 3745-21-09(L)	See section A.I.2.a. The requirements of this applicable rule are less stringent than the requirements specified in 40 CFR Part 63, Subpart CC.

2. Additional Terms and Conditions

2.a The permittee shall operate this emissions unit as a Group 1 storage vessel by employing an internal floating roof and seals to control VOC emissions. The permittee shall comply with the applicable storage vessel requirements as specified in Part II - Section C of this permit.

II. Operational Restrictions

1. See Part II - Section C for these terms and conditions.

III. Monitoring and/or Record keeping Requirements

1. See Part II - Section C for these terms and conditions.

IV. Reporting Requirements

1. See Part II - Section C for these terms and conditions.

V. Testing Requirements

1. Compliance with the control measures in section A.I.2.a of these terms and conditions shall be determined in accordance with the following method:

   a. Control Measures:

      The permittee shall employ an internal floating roof and seals when operating this emissions unit as a Group 1 storage vessel.

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a 835,254-gallon storage tank for the storage of petroleum liquids. The tank is identified as tank number 56 (emissions unit T030). It has an internal floating roof. The emissions unit currently operates as a Group 1 storage vessel under the refinery MACT (Subpart CC).	40 CFR Part 63, Subpart CC (MACT) OAC rule 3745-21-09(L)	See section A.I.2.a. The requirements of this applicable rule are less stringent than the requirements specified in 40 CFR Part 63, Subpart CC.

2. Additional Terms and Conditions

2.a The permittee shall operate this emissions unit as a Group 1 storage vessel by employing an internal floating roof and seals to control VOC emissions. The permittee shall comply with the applicable storage vessel requirements as specified in Part II - Section C of this permit.

II. Operational Restrictions

1. See Part II - Section C for these terms and conditions.

III. Monitoring and/or Record keeping Requirements

1. See Part II - Section C for these terms and conditions.

IV. Reporting Requirements

1. See Part II - Section C for these terms and conditions.

V. Testing Requirements

1. Compliance with the control measures in section A.I.2.a of these terms and conditions shall be determined in accordance with the following method:

   a. Control Measures:

      The permittee shall employ an internal floating roof and seals when operating this emissions unit as a Group 1 storage vessel.

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a 418,530-gallon Group 1 storage tank for the storage of petroleum liquids. The tank is identified as tank number 61 (emissions unit T033). It employs an internal floating roof.	40 CFR Part 63, Subpart CC (MACT) OAC rule 3745-21-09(L)	See section A.I.2.a. The requirements of this applicable rule are less stringent than the requirements specified in 40 CFR Part 63, Subpart CC.

2. Additional Terms and Conditions

2.a The permittee shall operate this emissions unit as a Group 1 storage vessel by employing an internal floating roof and seals to control VOC emissions. The permittee shall comply with the applicable storage vessel requirements as specified in Part II - Section C of this permit.

II. Operational Restrictions

1. See Part II - Section C for these terms and conditions.

III. Monitoring and/or Record keeping Requirements

1. See Part II - Section C for these terms and conditions.

IV. Reporting Requirements

1. See Part II - Section C for these terms and conditions.

V. Testing Requirements

1. Compliance with the control measures in section A.I.2.a of these terms and conditions shall be determined in accordance with the following method:

   a. Control Measures:

The permittee shall employ an internal floating roof and seals when operating this emissions unit as a Group 1 storage vessel.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a 1,004,010-gallon petroleum storage tank identified as tank number 66 (emissions unit T036). It has an external floating roof. It is classified as a Group 1 storage vessel, pursuant to 40 CFR Part 63, Subpart CC.	40 CFR Part 63, Subpart CC (MACT)	See section A.I.2.a.
	OAC rule 3745-21-09(Z)	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall operate this emissions unit as a Group 1 storage vessel by employing an external floating roof and seals to control VOC emissions. The permittee shall comply with the applicable storage vessel requirements as specified in Part II - Section C of this permit.

2.b The requirements of OAC rule 3745-21-09(Z) are less stringent than those in 40 CFR Part 63, Subpart CC.

II. Operational Restrictions

1. See Part II - Section C for these terms and conditions.

III. Monitoring and/or Record keeping Requirements

1. See Part II - Section C for these terms and conditions.

IV. Reporting Requirements

1. See Part II - Section C for these terms and conditions.

V. Testing Requirements

1. Compliance with the control measures in section A.I.2.a of these terms and conditions shall be determined in accordance with the following method:

a. Control Measures:

The permittee shall employ an external floating roof and seals when operating this emissions unit as a Group 1 storage vessel.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

V. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limiations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a 1,004,010-gallon storage tank for the storage of petroleum liquids. The tank is identified as tank number 67 (emissions unit T037). It has an internal floating roof. The emissions unit currently operates as a Group 1 storage vessel under the refinery MACT (Subpart CC).	40 CFR Part 63, Subpart CC (MACT) OAC rule 3745-21-09(L)	See section A.I.2.a. The requirements of this applicable rule are less stringent than the requirements specified in 40 CFR Part 63, Subpart CC.

2. Additional Terms and Conditions

2.a The permittee shall operate this emissions unit as a Group 1 storage vessel by employing an internal floating roof and seals to control VOC emissions. The permittee shall comply with the applicable storage vessel requirements as specified in Part II - Section C of this permit.

II. Operational Restrictions

1. See Part II - Section C for these terms and conditions.

III. Monitoring and/or Record keeping Requirements

1. See Part II - Section C for these terms and conditions.

IV. Reporting Requirements

1. See Part II - Section C for these terms and conditions.

V. Testing Requirements

1. Compliance with the control measures in section A.I.2.a of these terms and conditions shall be determined in accordance with the following method:

a. Control Measures:

The permittee shall employ an internal floating roof and seals when operating this emissions unit as a Group 1 storage vessel.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a 2,100,000-gallon crude oil storage vessel identified as tank number 68 (emissions unit T038). It is classified as a Group 2 storage vessel pursuant to 40 CFR Part 63.641 (Subpart CC). The crude oil stored in this emissions unit has a HAP concentration of less than 4 % by weight.	40 CFR Part 63.641, Subpart CC	See section A.I.2.a.
	OAC rule 3745-21-09(Z)	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46, 763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b The permittee shall not place, store, or hold any petroleum liquid in any such tank after the date specified in paragraph (C)(33) of OAC rule 3745-21-04 unless the tank is designed or equipped as follows:

a. The tank is equipped with one of the following:

i. A liquid-mounted primary seal and a rim-mounted secondary seal;

ii. A mechanical shoe primary seal and a rim-mounted secondary seal;

iii. A mechanical shoe primary seal and a shoe-mounted secondary seal, provided the shoe-mounted secondary seal was installed prior to January 1, 1981;

iv. A vapor-mounted primary seal and a rim-mounted secondary seal;

v. A flexible wiper primary seal and a rim-mounted secondary seal;

vi. A liquid-mounted primary seal or a mechanical shoe primary seal, provided the petroleum liquid is crude oil with a pour point of fifty degrees Fahrenheit or higher as determined by the "American Society for Testing and Materials Standard D 97-66: test for pour point of petroleum oils"; or

vii. A seal, closure or device which is, in the judgment of the director, equivalent to the following seals in controlling the emission of VOC into the ambient air:

(a) The dual seals specified in paragraph (Z)(1)(a)(i) or (Z)(1)(a)(ii) of this rule; or

(b) Either of the seals specified in paragraph (Z)(1)(a)(vi) of this rule, provided the petroleum liquid is crude oil with a pour point of fifty degrees Fahrenheit or higher as determined by the "American Society for Testing and Materials Standard D 97-66: test for pour point of petroleum oils".

II. Operational Restrictions

1. Each seal shall meet the following requirements:

a. There are no visible holes, tears, or other openings in the seal or seal fabric;

b. If the tank is of welded construction, the total seal gap area, as determined under paragraph (I) of OAC rule 3745-21-10, does not exceed:

i. 10.0 square inches per foot of tank diameter for a liquid-mounted primary seal or mechanical shoe primary seal;

ii. 10.0 square inches per foot of tank diameter for a vapor-mounted primary seal or flexible wiper primary seal, if said seal was installed prior to January 1, 1981;

iii. 1.0 square inch per foot of tank diameter for a vapor-mounted primary seal or flexible wiper primary seal, if said seal was installed on or after January 1, 1981;

iv. 1.0 square inch per foot of tank diameter for a rim-mounted secondary seal or shoe-mounted secondary seal; or

v. The amount which is assigned by the director for any seal which is equivalent under paragraph (Z)(1)(a)(vii) of this rule;

2. Any opening in the external floating roof, except automatic bleeder vents, rim space vents, leg sleeves, stub drains and slotted gauging/sampling wells, shall be equipped with:
   a. 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

   b. A projection into the tank below the liquid surface.

3. 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.

4. 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.

5. Any emergency roof drain shall be equipped with a slotted membrane fabric cover or other device which covers at least ninety per cent of the area of the opening.

6. Any stub drain shall be equipped with a projection into the tank below the liquid surface.

7. 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 ninety per cent of the area of the well opening.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall meet the following inspection and record keeping requirements:

   a. Inspect annually and seal and seal fabric for compliance with paragraph (Z)(1)(b)(i) of this rule;

   b. Measure annually, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10, the secondary seal gap or the primary seal gap, if there is no secondary seal, for compliance with the seal gap requirements of this permit;

   c. Measure at least once every five years, in accordance with the method specified in paragraph (I) of OAC rule 3745-21-10, the primary seal gap, if there is a secondary seal, for compliance with the seal gap requirements of this permit;

   d. Maintain for at least two years a record of the following:

      i. the dates and results of any inspections or measurements performed in accordance with this permit; and

      ii. the annual throughput of any petroleum liquid stored in the tank.

IV. Reporting Requirements

1. Provide immediately to the Director or an authorized representative of the director, upon written or verbal request at any reasonable time, a copy of the record required by this permit.

2. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Canton City Health Department, Air Pollution

Control Division at least thirty (30) days prior to such a change in the storage vessel's group designation.

V. Testing Requirements

1. Compliance with the applicable emission control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

   a. Control Measure:

      The permittee shall operate this emissions unit as a Group 2 storage vessel.

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1.

   b. Control Measure:

      The permittee shall not place, store, or hold any petroleum liquid in any such tank after the date specified in paragraph (C)(33) of OAC rule 3745-21-04 unless the tank is designed or equipped as indicated in section A.I.2.b.

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a 2,100,000-gallon petroleum storage tank identified as tank number 74 (emissions unit T039). It has an external floating roof. It is classified as a Group 1 storage vessel, pursuant to 40 CFR Part 63, Subpart CC. This storage vessel contains crude oil with a liquid HAP content in excess of 4 % by weight.	40 CFR Part 63, Subpart CC (MACT)	See section A.I.2.a.
	OAC rule 3745-21-09(Z)	The requirements specified in OAC rule 3745-21-09(Z) are as stringent as the requirements specified in 40 CFR Part 63, Subpart CC.

2. Additional Terms and Conditions

2.a The permittee shall operate this emissions unit as a Group 1 storage vessel by employing an external floating roof and seals to control VOC emissions. The permittee shall comply with the applicable storage vessel requirements as specified in Part II - Section C of this permit.

II. Operational Restrictions

1. See Part II - Section C for these terms and conditions.

III. Monitoring and/or Record keeping Requirements

1. See Part II - Section C for these terms and conditions.

IV. Reporting Requirements

1. See Part II - Section C for these terms and conditions.

V. Testing Requirements

1. Compliance with the control measures in section A.I.2.a of these terms and conditions shall be determined in accordance with the following method:

   a. Control Measures:

The permittee shall employ an external floating roof and seals when operating this emissions unit as a Group 1 storage vessel.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

V. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a 505,848-gallon Group 1 storage tank for the storage of petroleum liquids. The tank is identified as tank number 117 (emissions unit T040). It employs an internal floating roof.	40 CFR Part 63, Subpart CC (MACT) OAC rule 3745-21-09(L)	See section A.I.2.a. The requirements of this applicable rule are less stringent than the requirements specified in 40 CFR Part 63, Subpart CC.

2. Additional Terms and Conditions

2.a The permittee shall operate this emissions unit as a Group 1 storage vessel by employing an internal floating roof and seals to control VOC emissions. The permittee shall comply with the applicable storage vessel requirements as specified in Part II - Section C of this permit.

II. Operational Restrictions

1. See Part II - Section C for these terms and conditions.

III. Monitoring and/or Record keeping Requirements

1. See Part II - Section C for these terms and conditions.

IV. Reporting Requirements

1. See Part II - Section C for these terms and conditions.

V. Testing Requirements

1. Compliance with the control measures in section A.I.2.a of these terms and conditions shall be determined in accordance with the following method:

   a. Control Measures:

   The permittee shall employ an internal floating roof and seals when operating this emissions unit as a Group 1 storage vessel.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a 6,090,000-gallon Group 2 storage tank for the storage of crude oil. The tank is identified as tank number 214 (emissions unit T041). It employs an internal floating roof. The crude oil stored in this emissions unit has a concentration of less than 4 %.	40 CFR Part 63.641, Subpart CC OAC rule 3745-21-09(L)	See section A.I.2.a. See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46,763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute after the date specified in paragraph (C)(11) of OAC rule 3745-21-04 unless such tank, is designed or equipped as follows:

i. Vapor control equipment which is one of the following:

(a) Internal floating roof; or

(b) Alternative equivalent control for VOC emissions as may be approved by the director.

2.c The concentration of total Hazardous Air Pollutants(HAPs) of the liquid stored in this emissions unit shall not exceed four percent (4 %) by weight.

II. Operational Restrictions

1. If equipped with an internal floating roof, the automatic bleeder vents are to 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, are to be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

2. All openings, except stub drains, are to be equipped with a cover, seal, or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

3. The permittee shall employ other means for reducing the emission of VOC into the ambient air as may be required by the Director.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. All records shall be retained for as long as the storage vessel remains in operation or there is a change in the vessel's group category. Records shall be maintained in a manner that they can be readily accessible. Records may be maintained in a hard copy format or in computer-readable format.

IV. Reporting Requirements

1. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Canton City Health Department, Air Pollution Control Division at least thirty (30) days prior to such a change in the storage vessel's group designation.

2. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Canton City Health Department, Air Pollution Control Division within 30 days of becoming aware of the occurrence.

V. Testing Requirements

1. Compliance with the applicable emission control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

   a. Emission Limitation:

      The permittee shall operate this emissions unit as a Group 2 storage vessel.

      Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1.

b. Emission Limitation:

No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute after the date specified in paragraph (C)(11) of OAC rule 3745-21-04 unless such tank, is designed or equipped as follows:

i. Vapor control equipment which is one of the following:

(a) Internal floating roof; or

(b) Alternative equivalent control for VOC emissions as may be approved by the director.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a 1,849,638-gallon Group 1 storage tank for the storage of petroleum liquids. The tank is identified as tank number 225 (emissions unit T043). It employs an internal floating roof.	40 CFR Part 63, Subpart CC (MACT) OAC rule 3745-21-09(L)	See section A.I.2.a. The requirements of this applicable rule are less stringent than the requirements specified in 40 CFR Part 63, Subpart CC.

2. Additional Terms and Conditions

2.a The permittee shall operate this emissions unit as a Group 1 storage vessel by employing an internal floating roof and seals to control VOC emissions. The permittee shall comply with the applicable storage vessel requirements as specified in Part II - Section C of this permit.

II. Operational Restrictions

1. See Part II - Section C for these terms and conditions.

III. Monitoring and/or Record keeping Requirements

1. See Part II - Section C for these terms and conditions.

IV. Reporting Requirements

1. See Part II - Section C for these terms and conditions.

V. Testing Requirements

1. Compliance with the control measures in section A.I.2.a of these terms and conditions shall be determined in accordance with the following method:

   a. Control Measures:

   The permittee shall employ an internal floating roof and seals when operating this emissions unit as a Group 1 storage vessel.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a 6,090,000-gallon Group 2 storage tank for the storage of crude oil. The tank is identified as tank number 232 (emissions unit T044). It employs an internal floating roof. The crude oil stored in this storage vessel contains a HAP concentration of less than 4 % by weight.	40 CFR Part 63.641, Subpart CC	See section A.I.2.a.
	OAC rule 3745-21-09(L)	See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46,763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute after the date specified in paragraph (C)(11) of OAC rule 3745-21-04 unless such tank, is designed or equipped as follows:

i. Vapor control equipment which is one of the following:

(a) Internal floating roof; or

(b) Alternative equivalent control for VOC emissions as may be approved by the director.

2.c The concentration of total Hazardous Air Pollutants(HAPs) of the liquid stored in this emissions unit shall not exceed four percent (4 %) by weight.

II. Operational Restrictions

1. If equipped with an internal floating roof, the automatic bleeder vents are to 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, are to be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

2. All openings, except stub drains, are to be equipped with a cover, seal, or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

3. The permittee shall employ other means for reducing the emission of VOC into the ambient air as may be required by the Director.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. All records shall be retained for as long as the storage vessel remains in operation or there is a change in the vessel's group category. Records shall be maintained in a manner that they can be readily accessible. Records may be maintained in a hard copy format or in computer-readable format.

IV. Reporting Requirements

1. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Canton City Health Department, Air Pollution Control Division at least thirty (30) days prior to such a change in the storage vessel's group designation.

2. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Canton City Health Department, Air Pollution Control Division within 30 days of becoming aware of the occurrence.

V. Testing Requirements

1. Compliance with the applicable emission control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

   a. Control Measure:

The permittee shall operate this emissions unit as a Group 2 storage vessel.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1.

b. Control Measure:

No person shall place, store, or hold in a fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute after the date specified in paragraph (C)(11) of OAC rule 3745-21-04 unless such tank, is designed or equipped as follows:

i. Vapor control equipment which is one of the following:

(a) Internal floating roof; or

(b) Alternative equivalent control for VOC emissions as may be approved by the director.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a 4,031,034-gallon petroleum storage tank identified as tank number 52 (emissions unit T046). It has an external floating roof. It is classified as a Group 1 storage vessel, pursuant to 40 CFR Part 63, Subpart CC.	40 CFR Part 63, Subpart CC (MACT)	See section A.I.2.a.
	OAC rule 3745-21-09(Z)	The requirements specified in OAC rule 3745-21-09(Z) are as stringent as the requirements specified in 40 CFR Part 63, Subpart CC.

2. Additional Terms and Conditions

2.a The permittee shall operate this emissions unit as a Group 1 storage vessel by employing an external floating roof and seals to control VOC emissions. The permittee shall comply with the applicable storage vessel requirements as specified in Part II - Section C of this permit.

II. Operational Restrictions

1. See Part II - Section C for these terms and conditions.

III. Monitoring and/or Record keeping Requirements

1. See Part II - Section C for these terms and conditions.

IV. Reporting Requirements

1. See Part II - Section C for these terms and conditions.

V. Testing Requirements

1. Compliance with the control measures in section A.I.2.a of these terms and conditions shall be determined in accordance with the following method:

a. Control Measures:

The permittee shall employ an external floating roof and seals when operating this emissions unit as a Group 1 storage vessel.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

V. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a 532,350-gallon petroleum storage tank identified as tank number 71 (emissions unit T047). It has an external floating roof. It is classified as a Group 1 storage vessel, pursuant to 40 CFR Part 63, Subpart CC.	40 CFR Part 63, Subpart CC (MACT)	See section A.I.2.a.
	OAC rule 3745-21-09(Z)	The requirements specified in OAC rule 3745-21-09(Z) are as stringent as the requirements specified in 40 CFR Part 63, Subpart CC

2. Additional Terms and Conditions

2.a The permittee shall operate this emissions unit as a Group 1 storage vessel by employing an external floating roof and seals to control VOC emissions. The permittee shall comply with the applicable storage vessel requirements as specified in Part II - Section C of this permit.

II. Operational Restrictions

1. See Part II - Section C for these terms and conditions.

III. Monitoring and/or Record keeping Requirements

1. See Part II - Section C for these terms and conditions.

IV. Reporting Requirements

1 See Part II - Section C for these terms and conditions.

V. Testing Requirements

1. Compliance with the control measures in section A.I.2.a of these terms and conditions shall be determined in accordance with the following method:

a. Control Measures:

The permittee shall employ an external floating roof and seals when operating this emissions unit as a Group 1 storage vessel.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

V. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a 533,526-gallon petroleum storage tank identified as tank number 72 (emissions unit T048). It has an external floating roof. It is classified as a Group 1 storage vessel, pursuant to 40 CFR Part 63, Subpart CC.	40 CFR Part 63, Subpart CC (MACT)	See section A.I.2.a.
	OAC rule 3745-21-09(Z)	The requirements specified in OAC rule 3745-21-09(Z) are as stringent as the requirements specified in 40 CFR Part 63, Subpart CC

2. Additional Terms and Conditions

2.a The permittee shall operate this emissions unit as a Group 1 storage vessel by employing an external floating roof and seals to control VOC emissions. The permittee shall comply with the applicable storage vessel requirements as specified in Part II - Section C of this permit.

II. Operational Restrictions

1. See Part II - Section C for these terms and conditions.

III. Monitoring and/or Record keeping Requirements

1. See Part II - Section C for these terms and conditions.

IV. Reporting Requirements

1. See Part II - Section C for these terms and conditions.

V. Testing Requirements

1. Compliance with the control measures in section A.I.2.a of these terms and conditions shall be determined in accordance with the following method:

   a. Control Measures:

   The permittee shall employ an external floating roof and seals when operating this emissions unit as a Group 1 storage vessel.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

V. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a 974,862-gallon Group 1 storage tank for the storage of petroleum liquids. The tank is identified as tank number 119 (emissions unit T050). It employs an internal floating roof.	40 CFR Part 63, Subpart CC (MACT)	See section A.I.2.a.
	OAC rule 3745-21-09(L)	The requirements of this applicable rule are less stringent than the requirements specified in 40 CFR Part 63, Subpart CC.

2. Additional Terms and Conditions

2.a The permittee shall operate this emissions unit as a Group 1 storage vessel by employing an internal floating roof and seals to control VOC emissions. The permittee shall comply with the applicable storage vessel requirements as specified in Part II - Section C of this permit.

II. Operational Restrictions

1. See Part II - Section C for these terms and conditions.

III. Monitoring and/or Record keeping Requirements

1. See Part II - Section C for these terms and conditions.

IV. Reporting Requirements

1. See Part II - Section C for these terms and conditions.

V. Testing Requirements

1. Compliance with the control measures in section A.I.2.a of these terms and conditions shall be determined in accordance with the following method:

   a. Control Measures:

   The permittee shall employ an internal floating roof and seals when operating this emissions unit as a Group 1 storage vessel.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a 840,000-gallon fixed roof storage vessel for the storage of petroleum liquids with a maximum true vapor pressure of less than 11 psia. This storage vessel is identified as tank number 239 (emissions unit T051) and is equipped with a submerged fill line and an internal floating roof.	40 CFR Part 60, Subpart Kb	See section A.I.2.a.
	OAC rule 3745-31-05(A)(3) (PTI 15-0354)	1.9 tpy of volatile organic compounds (VOC) See section A.I.2.b.
	OAC rule 3745-21-09(L)	See section A.I.2.c.

2. Additional Terms and Conditions

2.a In accordance with 40 CFR Part 60.112b(a)(1)(ii), the permittee shall employ an internal floating roof equipped with seals to control the emissions of VOC from this emissions unit as specified in these terms and conditions.

2.b The requirements of this rule also include compliance with the requirements of 40 CFR Part 63, Subpart CC and OAC rule 3745-21-09(L).

2.c The requirements of this applicable rule are less stringent than the requirements specified in 40 CFR Part 60, Subpart Kb.

2.d This storage vessel shall only be used for the storage of petroleum liquids with a maximum true vapor pressure of less than 11 psia.

II. Operational Restrictions

1. The permittee shall comply with the operational restrictions as specified in Part II (General Facility Requirements) - Section E of this permit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall comply with the monitoring and record keeping requirements as specified in Part II (General Facility Requirements) - Section E of this permit.

2. The permittee shall maintain records of the actual annual throughput(s) (in either gallons/year or barrels/year) for this emissions unit.

3. The permittee shall calculate and maintain records of the annual VOC emissions from this emissions unit. The actual annual throughput(s) recorded for any calendar year shall be the basis for calculating the annual emissions of VOC by using the emissions estimation methodologies provided in the most current version of AP-42, section 5.1 " Transportation of Petroleum Liquids" or the most recent version of USEPA's TANKS computer program.

IV. Reporting Requirements

1. The permittee shall comply with the reporting requirements as specified in Part II (General Facility Requirements) - Section E of this permit.

2. If the permittee exceeds the annual emission rate noted in section A.I.1, the permittee shall submit a written report of this exceedance to the Canton City Health Department, Air Pollution Control Division within 30 days of the exceedance. The exceedance report shall identify the actual throughput(s) for the calendar year of concern and shall include the calculations of the VOC emissions. A report is required only if an exceedance occurs.

3. All deviation (excursion) reports shall be submitted to the Canton City Health Department, Air Pollution Control Division at least thirty (30) days prior to such a change in the storage vessel's group designation.

4. The permittee shall submit deviation (excursion) reports that identify each time when this storage vessel is used to store a volatile organic liquid with a maximum true vapor pressure greater than or equal to 11 psia.

V. Testing Requirements

1. Compliance with the emission control measures in section A.I.2.a shall be determined in accordance with the following method:

   a. Control Measures:

      In accordance with 40 CFR Part 60.112b(a)(1)(ii), the permittee shall employ an internal floating roof equipped with seals to control the emissions of VOC from this emissions unit as specified in these terms and conditions.

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.

   b. Emission Limitation:

      1.9 tpy of VOC

      Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.3.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a 533,946-gallon petroleum storage tank identified as tank number 73 (emissions unit T067). It has an external floating roof. It is classified as a Group 1 storage vessel, pursuant to 40 CFR Part 63, Subpart CC.	40 CFR Part 63, Subpart CC (MACT)	See section A.I.2.a.
	OAC rule 3745-21-09(Z)	The requirements specified in OAC rule 3745-21-09(Z) are as stringent as the requirements specified in 40 CFR Part 63, Subpart CC.

2. Additional Terms and Conditions

2.a The permittee shall operate this emissions unit as a Group 1 storage vessel by employing an external floating roof and seals to control VOC emissions. The permittee shall comply with the applicable storage vessel requirements as specified in Part II - Section C of this permit.

II. Operational Restrictions

1. See Part II - Section C for these terms and conditions.

III. Monitoring and/or Record keeping Requirements

1. See Part II - Section C for these terms and conditions.

IV. Reporting Requirements

1. See Part II - Section C for these terms and conditions.

V. Testing Requirements

1. Compliance with the control measures in section A.I.2.a of these terms and conditions shall be determined in accordance with the following method:

a. Control Measures:

The permittee shall employ an external floating roof and seals when operating this emissions unit as a Group 1 storage vessel.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

V. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a 546,000-gallon fixed roof storage vessel identified as tank number 8 (emissions unit T102) which is used to store wastewater. It is classified as a Group 2 storage vessel pursuant to 40 CFR Part 63.641 (Subpart CC).	40 CFR Part 63, Subpart CC	See section A.I.2.a.
	OAC rule 3745-21-09(Z)	exempt
		See section A.I.2.b.

2. Additional Terms and Conditions

2.a The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46,763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.b This emissions unit is exempt from the control requirements of OAC rule 3745-21-09(Z) because the storage vessel does not contain an petroleum liquid material with a maximum true vapor pressure greater than 1.52 psia and an average annual true vapor pressure of greater than 8.3 kpa (1.21 psia).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. All records shall be retained for as long as the storage vessel remains in operation or there is a change in the vessel's group category. Records shall be maintained in a manner that they can be readily accessible. Records may be maintained in a hard copy format or in computer-readable format.

IV. Reporting Requirements

1. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Canton City Health Department, Air Pollution Control Division at least thirty (30) days prior to such a change in the storage vessel's group designation.

2. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Canton City Health Department, Air Pollution Control Division within 30 days of becoming aware of the occurrence.

V. Testing Requirements

1. Compliance with the applicable emission control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

   a. Emission Limitation:

      The permittee shall operate this emissions unit as a Group 2 storage vessel.

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a 10,500-gallon ethanol storage vessel equipped with a fixed roof and identified as tank number 238 (emissions unit T129). It is also equipped with a submerged fill line.	40 CFR Part 60.116b(a) and (b), (Subpart Kb)	The permittee shall maintain records per 40 CFR Part 60.116(b), sections (a) and (b).
		exempt
	OAC rule 3745-21-09(L)	See section A.I.2.b.

2. Additional Terms and Conditions

2.a This emissions unit shall be subject to the requirements of 40 CFR Part 60, Subpart Kb [Part 60.110b(c)] if the permittee stores organic liquids with a maximum true vapor pressure greater than 3.5 KPa (0.5 psia). The permittee shall comply with 40 CFR Part 60, Subpart Kb by maintaining records as specified in 40 CFR Part 60.116b(a) and (b).

2.b This emissions unit is exempt from the requirements of OAC rule 3745-21-09(L) because it has a capacity less than 40,000 gallons.

II. Operational Restrictions

1. The permittee shall employ a submerged fill line on this storage vessel.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records showing the type of material stored within the storage vessel, the dimensions of the storage vessel, the true vapor pressure of the stored material at maximum storage temperature, and an analysis showing the capacity of the storage vessel.

2. All records shall be retained for as long as the storage vessel remains in operation. Records shall be maintained in a manner that they can be readily accessed. Records may be maintained in a hard copy format or in computer-readable format.

IV. Reporting Requirements

1. The permittee shall submit written deviation (excursion) reports that identify each change in the type of material stored. Storage of materials other than those described in section A.II.1 requires a written

request submitted to the Canton City Health Department, Air Pollution Control Division prior to storage and the subsequent written approval from the agency.

V. Testing Requirements

1. Compliance with the emission control measure in section A.II.1 of these terms and conditions shall be determined in accordance with the following method:

   a. Control Measure:

   This emissions unit shall be subject to the requirements of 40 CFR Part 60, Subpart Kb [Part 60.110b(c)] if the permittee stores organic liquids with a maximum true vapor pressure greater than 3.5 KPa (0.5 psia). The permittee shall comply with 40 CFR Part 60, Subpart Kb by maintaining records as specified in 40 CFR Part 60.116b(a) and (b).

   Applicable Compliance Method:

   Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.1.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a 1,344,000-gallon, fixed roof storage vessel for the storage of petroleum liquids with a true vapor pressure < 11 psia. This storage vessel is identified as tank number 240 (emissions unit T142) and is equipped with a submerged fill line and an internal floating roof.	40 CFR Part 60, Subpart Kb	See section A.I.2.a.
	OAC rule 3745-21-09(L)	See section A.I.2.b.
	OAC rule 3745-31-05(A)(3) (PTI 15-0553)	5 tpy of volatile organic compounds (VOC)
		See sections A.I.2.c and A.I.2.d.

2. Additional Terms and Conditions

2.a The permittee shall utilize an internal floating roof to control the emissions of VOC from this emissions unit according to the terms and conditions in Part II (General Facility Requirements) - Section E of this permit.

2.b The requirements specified by this rule are less stringent than the requirements established pursuant to 40 CFR Part 60, Subpart Kb.

2.c The permittee shall employ a submerged fill line for this storage vessel.

2.d The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(L) and 40 CFR Part 60, Subpart Kb.

II. Operational Restrictions

1. The permittee shall comply with the applicable operational restrictions as specified in Part II - Section E of these terms and conditions.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall comply with the applicable monitoring and record keeping requirements as specified in Part II - Section E of these terms and conditions.

2. The permittee shall maintain records of the actual annual throughput of each liquid stored in this emissions unit, in either gallons/year or barrels/year.

3. The permittee shall calculate and maintain records of the annual VOC emissions from this emissions unit. The actual annual throughput(s) recorded for any calendar year shall be the basis for calculating the annual emissions of VOC by using the emissions estimation methodologies provided in the most current version of AP-42, section 5.1 "Transportation of Petroleum Liquids" or the most recent version of USEPA's TANKS computer program.

IV. Reporting Requirements

1. The permittee shall comply with the applicable reporting requirements as specified in Part II - Section E of these terms and conditions.

2. The permittee shall furnish the Canton City Health Department, Air Pollution Control Division with a report that describes the control equipment and certifies that the control equipment meets the specifications of 40 CFR Part 60.112b(a)(1) and 40 CFR Part 60.113b(a)(1). This report shall be an attachment to the notification required by 40 CFR Part 60.7(a)(3).

3. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year. Should the actual total VOC emissions exceed 5 tpy, the permittee shall also submit the actual annual throughput of each liquid stored, as required in section A.III.2, and the calculations required in section A.III.3.

V. Testing Requirements

1. Compliance with the emission limitation and the control measure in sections A.I.1 and A.I.2.a of these terms and conditions shall be determined in accordance with the following methods:

   a. Control Measure:

      The permittee shall utilize an internal floating roof to control the emissions of VOC from this emissions unit according to the terms and conditions in Part II (General Facility Requirements) - Section E of this permit.

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.

   b. Emission Limitation:

      5 tpy of VOC

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the record keeping requirements specified in sections A.III.2 and A.III.3.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a 1,849,638-gallon, fixed roof storage vessel for the storage of petroleum liquids with a true vapor pressure < 11 psia. This storage vessel is identified as tank number 242 (emissions unit T143) and is equipped with a submerged fill line and an internal floating roof.	40 CFR Part 60, Subpart Kb	See section A.I.2.a.
	OAC rule 3745-21-09(L)	See section A.I.2.b.
	OAC rule 3745-31-05(A)(3) (PTI 15-0511)	3 tpy of volatile organic compounds (VOC)
		See sections A.I.2.c and A.I.2.d.

2. Additional Terms and Conditions

2.a The permittee shall utilize an internal floating roof to control the emissions of VOC from this emissions unit according to the terms and conditions in Part II (General Facility Requirements) - Section E of this permit.

2.b The requirements specified by this rule are less stringent than the requirements established pursuant to 40 CFR Part 60, Subpart Kb.

2.c The permittee shall employ a submerged fill line for this storage vessel.

2.d The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(L) and 40 CFR Part 60, Subpart Kb.

II. Operational Restrictions

1. The permittee shall comply with the applicable operational restrictions as specified in Part II - Section E of these terms and conditions.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall comply with the applicable monitoring and record keeping requirements as specified in Part II - Section E of these terms and conditions.

2. The permittee shall maintain records of the actual annual throughput of each liquid stored in this emissions unit, in either gallons/year or barrels/year.

3. The permittee shall calculate and maintain records of the annual VOC emissions from this emissions unit. The actual annual throughput(s) recorded for any calendar year shall be the basis for calculating the annual emissions of VOC by using the emissions estimation methodologies provided in the most current version of AP-42, section 5.1 "Transportation of Petroleum Liquids" or the most recent version of USEPA's TANKS computer program.

IV. Reporting Requirements

1. The permittee shall comply with the applicable reporting requirements as specified in Part II - Section E of these terms and conditions.

2. The permittee shall furnish the Canton City Health Department, Air Pollution Control Division with a report that describes the control equipment and certifies that the control equipment meets the specifications of 40 CFR Part 60.112b(a)(1) and 40 CFR Part 60.113b(a)(1). This report shall be an attachment to the notification required by 40 CFR Part 60.7(a)(3).

3. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year. Should the actual total VOC emissions exceed 3 tpy, the permittee shall also submit the actual annual throughput of each liquid stored, as required in section A.III.2, and the calculations required in section A.III.3.

V. Testing Requirements

1. Compliance with the emission limitation and the control measure in sections A.I.1 and A.I.2.a of these terms and conditions shall be determined in accordance with the following methods:

   a. Control Measure:

      The permittee shall utilize an internal floating roof to control the emissions of VOC from this emissions unit according to the terms and conditions in Part II (General Facility Requirements) - Section E of this permit.

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.

   b. Emission Limitation:

      3 tpy of VOC

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the record keeping requirements specified in sections A.III.2 and A.III.3.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a 1,260,000-gallon, fixed roof storage vessel for the storage of petroleum liquids with a true vapor pressure < 11 psia. This storage vessel is identified as tank number 243 (emissions unit T144) and is equipped with a submerged fill line and an internal floating roof.	40 CFR Part 60, Subpart Kb	See section A.I.2.a.
	OAC rule 3745-21-09(L)	See section A.I.2.b.
	OAC rule 3745-31-05(A)(3) (PTI 15-1107)	6 tpy of volatile organic compounds (VOC)
		See sections A.I.2.c and A.I.2.d.

2. Additional Terms and Conditions

2.a The permittee shall utilize an internal floating roof to control the emissions of VOC from this emissions unit according to the terms and conditions in Part II (General Facility Requirements) - Section E of this permit.

2.b The requirements specified by this rule are less stringent than the requirements established pursuant to 40 CFR Part 60, Subpart Kb.

2.c The permittee shall employ a submerged fill line for this storage vessel.

2.d The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(L) and 40 CFR Part 60, Subpart Kb.

II. Operational Restrictions

1. The permittee shall comply with the applicable operational restrictions as specified in Part II - Section E of these terms and conditions.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall comply with the applicable monitoring and record keeping requirements as specified in Part II - Section E of these terms and conditions.

2. The permittee shall maintain records of the actual annual throughput of each liquid stored in this emissions unit, in either gallons/year or barrels/year.

3. The permittee shall calculate and maintain records of the annual VOC emissions from this emissions unit. The actual annual throughput(s) recorded for any calendar year shall be the basis for calculating the annual emissions of VOC by using the emissions estimation methodologies provided in the most current version of AP-42, section 5.1 "Transportation of Petroleum Liquids" or the most recent version of USEPA's TANKS computer program.

IV. Reporting Requirements

1. The permittee shall comply with the applicable reporting requirements as specified in Part II - Section E of these terms and conditions.

2. The permittee shall furnish the Canton City Health Department, Air Pollution Control Division with a report that describes the control equipment and certifies that the control equipment meets the specifications of 40 CFR Part 60.112b(a)(1) and 40 CFR Part 60.113b(a)(1). This report shall be an attachment to the notification required by 40 CFR Part 60.7(a)(3).

3. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year. Should the actual total VOC emissions exceed 6 tpy, the permittee shall also submit the actual annual throughput of each liquid stored, as required in section A.III.2, and the calculations required in section A.III.3.

V. Testing Requirements

1. Compliance with the emission limitation and the control measure in sections A.I.1 and A.I.2.a of these terms and conditions shall be determined in accordance with the following methods:

   a. Control Measure:

      The permittee shall utilize an internal floating roof to control the emissions of VOC from this emissions unit according to the terms and conditions in Part II (General Facility Requirements) - Section E of this permit.

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.

   b. Emission Limitation:

      6 tpy of VOC

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the record keeping requirements specified in sections A.III.2 and A.III.3.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a 4,000,000-gallon fixed roof storage vessel identified as tank number 1 (emissions unit T145) which is used to store wastewater. It is classified as a Group 2 storage vessel pursuant to 40 CFR Part 63.641 (Subpart CC).	40 CFR Part 60.116b(b), Subpart Kb	See sections A.I.2.a and A.I.2.d.
	OAC rule 3745-31-05(A)(3) (PTI 15-586)	0.3 tpy of OC
	40 CFR Part 63, Subpart CC	See section A.I.2.b.
	OAC rule 3745-21-09(Z)	exempt See section A.I.2.c.

2. Additional Terms and Conditions

2.a This emissions unit shall be subject to the requirements of 40 CFR Part 60, Subpart Kb [Part 60.110b(c)] if the permittee stores organic liquids with a maximum true vapor pressure greater than 3.5 KPa (0.5 psia). The permittee shall comply with 40 CFR Part 60, Subpart Kb by maintaining records as specified in 40 CFR Part 60.116b(a) and (b).

2.b The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46,763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.c This emissions unit is exempt from the control requirements of OAC rule 3745-21-09(Z) because the storage vessel does not contain a petroleum liquid material with a maximum true

vapor pressure greater than 1.52 psia and an average annual true vapor pressure of greater than 8.3 kpa (1.21 psia).

2.d The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart Kb.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. All records shall be retained for as long as the storage vessel remains in operation or there is a change in the vessel's group category. Records shall be maintained in a manner that they can be readily accessible. Records may be maintained in a hard copy format or in computer-readable format.

3. The permittee shall calculate and maintain records of the annual emissions of VOC from this emissions unit by using the emissions estimation methodologies provided in the most current version of AP-42, Section 5.2 "Transportation and Marketing of Petroleum Liquids" or the most updated version of USEPA's TANKS computer program. The actual annual throughput(s) recorded for any calendar year shall be the basis for calculating the annual emissions.

4. The permittee shall maintain records of the actual annual throughput of each liquid for this storage vessel.

IV. Reporting Requirements

1. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Canton City Health Department, Air Pollution Control Division at least thirty (30) days prior to such a change in the storage vessel's group designation.

2. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Canton City Health Department, Air Pollution Control Division within 30 days of becoming aware of the occurrence.

3. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year. Should the actual total VOC emissions exceed 0.3 tpy, the permittee shall also submit the actual annual throughput of each liquid, as stored required in section A.III.4 and the calculations required in section A.III.3.

V. Testing Requirements

1. Compliance with the applicable emission control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

   a. Emission Limitation:

      The permittee shall operate this emissions unit as a Group 2 storage vessel.

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1.

   b. Control Measure:

      This emissions unit shall be subject to the requirements of 40 CFR Part 60, Subpart Kb [Part 60.110b(c)] if the permittee stores organic liquids with a maximum true vapor pressure greater than 3.5 KPa (0.5 psia). The permittee shall comply with 40 CFR Part 60, Subpart Kb by maintaining records as specified in 40 CFR Part 60.116b(a) and (b).

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.1.

   b. Emission Limitation:

      0.3 tpy of VOC

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in sections A.III.3 and A.III.4.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a 2,300,000-gallon fixed roof storage vessel identified as tank number 2 (emissions unit T146) which is used to store wastewater. It is classified as a Group 2 storage vessel pursuant to 40 CFR Part 63.641 (Subpart CC).	40 CFR Part 60.116b(b), Subpart Kb	See sections A.I.2.a and A.I.2.d.
	OAC rule 3745-31-05(A)(3) (PTI 15-586)	0.3 tpy of OC
	40 CFR Part 63, Subpart CC	See section A.I.2.b.
	OAC rule 3745-21-09(Z)	exempt See section A.I.2.c.

2. Additional Terms and Conditions

2.a This emissions unit shall be subject to the requirements of 40 CFR Part 60, Subpart Kb [Part 60.110b(c)] if the permittee stores organic liquids with a maximum true vapor pressure greater than 3.5 KPa (0.5 psia). The permittee shall comply with 40 CFR Part 60, Subpart Kb by maintaining records as specified in 40 CFR Part 60.116b(a) and (b).

2.b The permittee shall operate this emissions unit as a Group 2 storage vessel as defined in 40 CFR Part 63.641. To be classified as a Group 1 storage vessel, the design storage capacity of the storage vessel must be greater than or equal to 177 cubic meters (46,763 gallons), and store an organic liquid material with a maximum true vapor pressure greater than or equal to 10.4 kpa (1.51 psia), and store an organic liquid material with an average annual true vapor pressure greater than or equal to 8.3 kpa (1.21 psia), and store an organic liquid material with an average annual HAP concentration greater than 4%, by weight, as total organic HAP. Because this emissions unit does not meet the Group 1 definition as stated in 40 CFR Part 63.641, this emissions unit shall be operated as a Group 2 storage vessel. In accordance with 40 CFR Part 63.641, the permittee shall maintain records as specified in section A.III.1 for the Group 2 storage vessel while it is in operation and report any changes in the group status of the storage vessel as specified in section A.IV.1.

2.c This emissions unit is exempt from the control requirements of OAC rule 3745-21-09(Z) because the storage vessel does not contain a petroleum liquid material with a maximum true vapor pressure greater than 1.52 psia and an average annual true vapor pressure of greater than 8.3 kpa (1.21 psia).

2.d The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart Kb.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the storage vessel's group designation for each stored material, an identification of each stored material, the average annual weight percent of HAP of each stored material, the maximum true vapor pressure and average annual true vapor pressure of each stored material, in psia, and the storage vessel's dimensions, and an analysis showing the capacity of the vessel.

2. All records shall be retained for as long as the storage vessel remains in operation or there is a change in the vessel's group category. Records shall be maintained in a manner that they can be readily accessible. Records may be maintained in a hard copy format or in computer-readable format.

3. The permittee shall calculate and maintain records of the annual emissions of VOC from this emissions unit by using the emissions estimation methodologies provided in the most current version of AP-42, Section 5.2 "Transportation and Marketing of Petroleum Liquids" or the most updated version of USEPA's TANKS computer program. The actual annual throughput(s) recorded for any calendar year shall be the basis for calculating the annual emissions.

4. The permittee shall maintain records of the actual annual throughput of each liquid for this storage vessel.

IV. Reporting Requirements

1. The permittee shall submit a deviation report describing any operational process change to this emissions unit that causes it to change from a Group 2 storage vessel to a Group 1 storage vessel. Each deviation report shall be submitted to the Canton City Health Department, Air Pollution Control Division at least thirty (30) days prior to such a change in the storage vessel's group designation.

2. The permittee shall submit a deviation report when the maximum true vapor pressure of the stored material exceeds 1.52 psia. Each deviation report shall be submitted to the Canton City Health Department, Air Pollution Control Division within 30 days of becoming aware of the occurrence.

3. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year. Should the actual total VOC emissions exceed 0.3 tpy, the permittee shall also submit the actual annual throughput of each liquid, as stored required in section A.III.4 and the calculations required in section A.III.3.

V. Testing Requirements

1. Compliance with the applicable emission control measures in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

a. Emission Limitation:

The permittee shall operate this emissions unit as a Group 2 storage vessel.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1.

b. Control Measure:

This emissions unit shall be subject to the requirements of 40 CFR Part 60, Subpart Kb [Part 60.110b(c)] if the permittee stores organic liquids with a maximum true vapor pressure greater than 3.5 KPa (0.5 psia). The permittee shall comply with 40 CFR Part 60, Subpart Kb by maintaining records as specified in 40 CFR Part 60.116b(a) and (b).

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.1.

c. Emission Limitation:

0.3 tpy of VOC

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in sections A.III.3 and A.III.4.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a 1,176,000-gallon, fixed roof storage vessel for the storage of petroleum liquids with a true vapor pressure < 11 psia. This storage vessel is identified as tank number 244 (emissions unit T148) and is equipped with a submerged fill line and an internal floating roof.	40 CFR Part 60, Subpart Kb	See section A.I.2.a.
	OAC rule 3745-21-09(L)	See section A.I.2.b.
	OAC rule 3745-31-05(A)(3) (PTI 15-0607)	2.48 tpy of volatile organic compounds (VOC) See sections A.I.2.c and A.I.2.d.

2. Additional Terms and Conditions

2.a The permittee shall utilize an internal floating roof to control the emissions of VOC from this emissions unit according to the terms and conditions in Part II (General Facility Requirements) - Section E of this permit.

2.b The requirements specified by this rule are less stringent than the requirements established pursuant to 40 CFR Part 60, Subpart Kb.

2.c The permittee shall employ a submerged fill line for this storage vessel.

2.d The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(L) and 40 CFR Part 60, Subpart Kb.

II. Operational Restrictions

1. The permittee shall comply with the applicable operational restrictions as specified in Part II - Section E of these terms and conditions.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall comply with the applicable monitoring and record keeping requirements as specified in Part II - Section E of these terms and conditions.

2. The permittee shall maintain records of the actual annual throughput of each liquid stored in this emissions unit, in either gallons/year or barrels/year.
3. The permittee shall calculate and maintain records of the annual VOC emissions from this emissions unit. The actual annual throughput(s) recorded for any calendar year shall be the basis for calculating the annual emissions of VOC by using the emissions estimation methodologies provided in the most current version of AP-42, section 5.1 "Transportation of Petroleum Liquids" or the most recent version of USEPA's TANKS computer program.

IV. Reporting Requirements

1. The permittee shall comply with the applicable reporting requirements as specified in Part II - Section E of these terms and conditions.

2. The permittee shall furnish the Canton City Health Department, Air Pollution Control Division with a report that describes the control equipment and certifies that the control equipment meets the specifications of 40 CFR Part 60.112b(a)(1) and 40 CFR Part 60.113b(a)(1). This report shall be an attachment to the notification required by 40 CFR Part 60.7(a)(3).

3. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year. Should the actual total VOC emissions exceed 2.48 tpy, the permittee shall also submit the actual annual throughput of each liquid stored, as required in section A.III.2, and the calculations required in section A.III.3.

V. Testing Requirements

1. Compliance with the emission limitation and the control measure in sections A.I.1 and A.I.2.a of these terms and conditions shall be determined in accordance with the following methods:

   a. Control Measure:

      The permittee shall utilize an internal floating roof to control the emissions of VOC from this emissions unit according to the terms and conditions in Part II (General Facility Requirements) - Section E of this permit.

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.

   b. Emission Limitation:

      2.48 tpy of VOC

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the record keeping requirements specified in sections A.III.2 and A.III.3.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a 1,180,000-gallon, fixed roof storage vessel for the storage of petroleum liquids with a true vapor pressure < 11 psia. This storage vessel is identified as tank number 245 (emissions unit T149) and is equipped with a submerged fill line and an internal floating roof.	40 CFR Part 60, Subpart Kb	See section A.I.2.a.
	OAC rule 3745-21-09(L)	See section A.I.2.b.
	OAC rule 3745-31-05(A)(3) (PTI 15-0607)	2.48 tpy of volatile organic compounds (VOC) See sections A.I.2.c and A.I.2.d.

2. Additional Terms and Conditions

2.a The permittee shall utilize an internal floating roof to control the emissions of VOC from this emissions unit according to the terms and conditions in Part II (General Facility Requirements) - Section E of this permit.

2.b The requirements specified by this rule are less stringent than the requirements established pursuant to 40 CFR Part 60, Subpart Kb.

2.c The permittee shall employ a submerged fill line for this storage vessel.

2.d The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(L) and 40 CFR Part 60, Subpart Kb.

II. Operational Restrictions

1. The permittee shall comply with the applicable operational restrictions as specified in Part II - Section E of these terms and conditions.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall comply with the applicable monitoring and record keeping requirements as specified in Part II - Section E of these terms and conditions.

2. The permittee shall maintain records of the actual annual throughput of each liquid stored in this emissions unit, in either gallons/year or barrels/year.

3. The permittee shall calculate and maintain records of the annual VOC emissions from this emissions unit. The actual annual throughput(s) recorded for any calendar year shall be the basis for calculating the annual emissions of VOC by using the emissions estimation methodologies provided in the most current version of AP-42, section 5.1 "Transportation of Petroleum Liquids" or the most recent version of USEPA's TANKS computer program.

IV. Reporting Requirements

1. The permittee shall comply with the applicable reporting requirements as specified in Part II - Section E of these terms and conditions.

2. The permittee shall furnish the Canton City Health Department, Air Pollution Control Division with a report that describes the control equipment and certifies that the control equipment meets the specifications of 40 CFR Part 60.112b(a)(1) and 40 CFR Part 60.113b(a)(1). This report shall be an attachment to the notification required by 40 CFR Part 60.7(a)(3).

3. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year. Should the actual total VOC emissions exceed 2.48 tpy, the permittee shall also submit the actual annual throughput of each liquid stored, as required in section A.III.2, and the calculations required in section A.III.3.

V. Testing Requirements

1. Compliance with the emission limitation and the control measure in sections A.I.1 and A.I.2.a of these terms and conditions shall be determined in accordance with the following methods:

   a. Control Measure:

      The permittee shall utilize an internal floating roof to control the emissions of VOC from this emissions unit according to the terms and conditions in Part II (General Facility Requirements) - Section E of this permit.

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.

   b. Emission Limitation:

      2.48 tpy of VOC

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the record keeping requirements specified in sections A.III.2 and A.III.3.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a 39,800-gallon slop oil storage vessel equipped with a fixed roof and identified as tank number 246 (emissions unit T153). It is also equipped with a submerged fill line.	40 CFR Part 60, Subpart Kb	See section A.III.1.
	OAC rule 3745-31-05(A)(3) (PTI 15-1018)	1.2 tpy of VOC See sections A.I.2.a and A.I.2.b.
	OAC rule 3745-21-09(L)(2)(a)	exempt See section A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall employ a permanent submerged fill pipe.

2.b The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(L) and 40 CFR Part 60, Subpart Kb.

2.c 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.

II. Operational Restrictions

1. The permittee shall store only petroleum liquids with a maximum true vapor pressure less than 3.5 KPa (0.5 psia) in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records showing the type of material stored within the storage vessel, the dimensions of the storage vessel, the true vapor pressure of the stored material at maximum storage temperature, and an analysis showing the capacity of the storage vessel.

2. The permittee shall maintain records of the actual annual throughput of each liquid stored in this emissions unit.

3. The permittee shall calculate and maintain records of the annual emissions of VOC from this emissions unit by using the emissions estimation methodologies provided in the most current version of AP-42, Section 5.2 “Transportation and Marketing of Petroleum Liquids” or the most updated

version USEPA's TANKS computer program. The actual annual throughput(s) recorded for any calendar year shall be the basis for calculating the annual emissions.

4. All records shall be retained for as long as the storage vessel remains in operation. Records shall be maintained in a manner that they can be readily accessed. Records may be maintained in a hard copy format or in computer-readable format.

IV. Reporting Requirements

1. The permittee shall submit a written deviation (excursion) report when the maximum true vapor pressure of the material stored in this storage vessel is greater than or equal to 3.5 KPa (0.5 psia).

2. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year. Should the actual total VOC emissions exceed 1.2 tpy, the permittee shall also submit the actual annual throughput of each liquid stored, as required in section A.III.2, and the calculations required in section A.III.3.

V. Testing Requirements

1. Compliance with the emission limitation and control measures in sections A.I.1 and A.II.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Control Measure:

      The permittee shall store only petroleum liquids with a maximum true vapor pressure less than 3.5 KPa (0.5 psia) in this emissions unit.

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1.

   b. Emission Limitation:

      1.2 tpy of VOC

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.3.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a 39,800-gallon slop oil storage vessel equipped with a fixed roof and identified as tank number 247 (emissions unit T154). It is also equipped with a submerged fill line.	40 CFR Part 60, Subpart Kb	See section A.III.1.
	OAC rule 3745-31-05(A)(3) (PTI 15-1018)	1.2 tpy of VOC See sections A.I.2.a and A.I.2.b.
	OAC rule 3745-21-09(L)(2)(a)	exempt See section A.I.2.c.

2. Additional Terms and Conditions

2.a The permittee shall employ a permanent submerged fill pipe.

2.b The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(L) and 40 CFR Part 60, Subpart Kb.

2.c 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.

II. Operational Restrictions

1. The permittee shall store only petroleum liquids with a maximum true vapor pressure less than 3.5 KPa (0.5 psia) in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records showing the type of material stored within the storage vessel, the dimensions of the storage vessel, the true vapor pressure of the stored material at maximum storage temperature, and an analysis showing the capacity of the storage vessel.

2. The permittee shall maintain records of the actual annual throughput of each liquid stored in this emissions unit.

3. The permittee shall calculate and maintain records of the annual emissions of VOC from this emissions unit by using the emissions estimation methodologies provided in the most current version of AP-42, Section 5.2 “Transportation and Marketing of Petroleum Liquids” or the most updated

version USEPA's TANKS computer program. The actual annual throughput(s) recorded for any calendar year shall be the basis for calculating the annual emissions.

4. All records shall be retained for as long as the storage vessel remains in operation. Records shall be maintained in a manner that they can be readily accessed. Records may be maintained in a hard copy format or in computer-readable format.

IV. Reporting Requirements

1. The permittee shall submit a written deviation (excursion) report when the maximum true vapor pressure of the material stored in this storage vessel is greater than or equal to 3.5 KPa (0.5 psia).

2. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year. Should the actual total VOC emissions exceed 1.2 tpy, the permittee shall also submit the actual annual throughput of each liquid stored, as required in section A.III.2, and the calculations required in section A.III.3.

V. Testing Requirements

1. Compliance with the emission limitation and control measures in sections A.I.1 and A.II.1 of these terms and conditions shall be determined in accordance with the following methods:

   a. Control Measure:

      The permittee shall store only petroleum liquids with a maximum true vapor pressure less than 3.5 KPa (0.5 psia) in this emissions unit.

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1.

   b. Emission Limitation:

      1.2 tpy of VOC

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.3.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a 550,000-gallon, fixed roof storage vessel for the storage of petroleum liquids with a true vapor pressure < 11 psia. This storage vessel is identified as tank number 251 (emissions unit T162) and is equipped with a submerged fill line and an internal floating roof.	40 CFR Part 60, Subpart Kb	See section A.I.2.a.
	OAC rule 3745-21-09(L)	See section A.I.2.b.
	OAC rule 3745-31-05(A)(3) (PTI 15-0607)	3.32 tpy of volatile organic compounds (VOC)
		See sections A.I.2.c and A.I.2.d.

2. Additional Terms and Conditions

2.a The permittee shall utilize an internal floating roof to control the emissions of VOC from this emissions unit according to the terms and conditions in Part II (General Facility Requirements) - Section E of this permit.

2.b The requirements specified by this rule are less stringent than the requirements established pursuant to 40 CFR Part 60, Subpart Kb.

2.c The permittee shall employ a submerged fill line for this storage vessel.

2.d The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(L) and 40 CFR Part 60, Subpart Kb.

II. Operational Restrictions

1. The permittee shall comply with the applicable operational restrictions as specified in Part II - Section E of these terms and conditions.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall comply with the applicable monitoring and record keeping requirements as specified in Part II - Section E of these terms and conditions.

2. The permittee shall maintain records of the actual annual throughput of each liquid stored in this emissions unit, in either gallons/year or barrels/year.

3. The permittee shall calculate and maintain records of the annual VOC emissions from this emissions unit. The actual annual throughput(s) recorded for any calendar year shall be the basis for calculating the annual emissions of VOC by using the emissions estimation methodologies provided in the most current version of AP-42, section 5.1 "Transportation of Petroleum Liquids" or the most recent version of USEPA's TANKS computer program.

IV. Reporting Requirements

1. The permittee shall comply with the applicable reporting requirements as specified in Part II - Section E of these terms and conditions.

2. The permittee shall furnish the Canton City Health Department, Air Pollution Control Division with a report that describes the control equipment and certifies that the control equipment meets the specifications of 40 CFR Part 60.112b(a)(1) and 40 CFR Part 60.113b(a)(1). This report shall be an attachment to the notification required by 40 CFR Part 60.7(a)(3).

3. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year. Should the actual total VOC emissions exceed 3.32 tpy, the permittee shall also submit the actual annual throughput of each liquid stored, as required in section A.III.2, and the calculations required in section A.III.3.

V. Testing Requirements

1. Compliance with the emission limitation and the control measure in sections A.I.1 and A.I.2.a of these terms and conditions shall be determined in accordance with the following methods:

   a. Control Measure:

      The permittee shall utilize an internal floating roof to control the emissions of VOC from this emissions unit according to the terms and conditions in Part II (General Facility Requirements) - Section E of this permit.

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.

   b. Emission Limitation:

      3.32 tpy of VOC

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the record keeping requirements specified in sections A.III.2 and A.III.3.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a 550,000-gallon, fixed roof storage vessel for the storage of petroleum liquids with a true vapor pressure < 11 psia. This storage vessel is identified as tank number 253 (emissions unit T167) and is equipped with a submerged fill line and an internal floating roof.	40 CFR Part 60, Subpart Kb	See section A.I.2.a.
	OAC rule 3745-21-09(L)	See section A.I.2.b.
	OAC rule 3745-31-05(A)(3) (PTI 15-1190)	5.36 tpy of volatile organic compounds (VOC)
		See sections A.I.2.c and A.I.2.d.

2. Additional Terms and Conditions

2.a The permittee shall utilize an internal floating roof to control the emissions of VOC from this emissions unit according to the terms and conditions in Part II (General Facility Requirements) - Section E of this permit.

2.b The requirements specified by this rule are less stringent than the requirements established pursuant to 40 CFR Part 60, Subpart Kb.

2.c The permittee shall employ a submerged fill line for this storage vessel.

2.d The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(L) and 40 CFR Part 60, Subpart Kb.

II. Operational Restrictions

1. The permittee shall comply with the applicable operational restrictions as specified in Part II - Section E of these terms and conditions.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall comply with the applicable monitoring and record keeping requirements as specified in Part II - Section E of these terms and conditions.

2. The permittee shall maintain records of the actual annual throughput of each liquid stored in this emissions unit, in either gallons/year or barrels/year.
3. The permittee shall calculate and maintain records of the annual VOC emissions from this emissions unit. The actual annual throughput(s) recorded for any calendar year shall be the basis for calculating the annual emissions of VOC by using the emissions estimation methodologies provided in the most current version of AP-42, section 5.1 "Transportation of Petroleum Liquids" or the most recent version of USEPA's TANKS computer program.

IV. Reporting Requirements

1. The permittee shall comply with the applicable reporting requirements as specified in Part II - Section E of these terms and conditions.

2. The permittee shall furnish the Canton City Health Department, Air Pollution Control Division with a report that describes the control equipment and certifies that the control equipment meets the specifications of 40 CFR Part 60.112b(a)(1) and 40 CFR Part 60.113b(a)(1). This report shall be an attachment to the notification required by 40 CFR Part 60.7(a)(3).

3. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year. Should the actual total VOC emissions exceed 5.36 tpy, the permittee shall also submit the actual annual throughput of each liquid stored, as required in section A.III.2, and the calculations required in section A.III.3.

V. Testing Requirements

1. Compliance with the emission limitation and the control measure in sections A.I.1 and A.I.2.a of these terms and conditions shall be determined in accordance with the following methods:

   a. Control Measure:

      The permittee shall utilize an internal floating roof to control the emissions of VOC from this emissions unit according to the terms and conditions in Part II (General Facility Requirements) - Section E of this permit.

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.

   b. Emission Limitation:

      5.36 tpy of VOC

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the record keeping requirements specified in sections A.III.2 and A.III.3.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a 1,180,000-gallon, fixed roof storage vessel for the storage of petroleum liquids with a true vapor pressure < 11 psia. This storage vessel is identified as tank number 62 (emissions unit T169) and is equipped with a submerged fill line and an internal floating roof.	40 CFR Part 60, Subpart Kb	See section A.I.2.a.
	OAC rule 3745-21-09(L)	See section A.I.2.b.
	OAC rule 3745-31-05(A)(3) (PTI 15-1252)	2.9 tpy of volatile organic compounds (VOC) See sections A.I.2.c and A.I.2.d.

2. Additional Terms and Conditions

2.a The permittee shall utilize an internal floating roof to control the emissions of VOC from this emissions unit according to the terms and conditions in Part II (General Facility Requirements) - Section E of this permit.

2.b The requirements specified by this rule are less stringent than the requirements established pursuant to 40 CFR Part 60, Subpart Kb.

2.c The permittee shall employ a submerged fill line for this storage vessel.

2.d The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(L) and 40 CFR Part 60, Subpart Kb.

II. Operational Restrictions

1. The permittee shall comply with the applicable operational restrictions as specified in Part II - Section E of these terms and conditions.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall comply with the applicable monitoring and record keeping requirements as specified in Part II - Section E of these terms and conditions.

2. The permittee shall maintain records of the actual annual throughput of each liquid stored in this emissions unit, in either gallons/year or barrels/year.

3. The permittee shall calculate and maintain records of the annual VOC emissions from this emissions unit. The actual annual throughput(s) recorded for any calendar year shall be the basis for calculating the annual emissions of VOC by using the emissions estimation methodologies provided in the most current version of AP-42, section 5.1 "Transportation of Petroleum Liquids" or the most recent version of USEPA's TANKS computer program.

IV. Reporting Requirements

1. The permittee shall comply with the applicable reporting requirements as specified in Part II - Section E of these terms and conditions.

2. The permittee shall furnish the Canton City Health Department, Air Pollution Control Division with a report that describes the control equipment and certifies that the control equipment meets the specifications of 40 CFR Part 60.112b(a)(1) and 40 CFR Part 60.113b(a)(1). This report shall be an attachment to the notification required by 40 CFR Part 60.7(a)(3).

3. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year. Should the actual total VOC emissions exceed 2.9 tpy, the permittee shall also submit the actual annual throughput of each liquid stored, as required in section A.III.2, and the calculations required in section A.III.3.

V. Testing Requirements

1. Compliance with the emission limitation and the control measure in sections A.I.1 and A.I.2.a of these terms and conditions shall be determined in accordance with the following methods:

   a. Control Measure:

      The permittee shall utilize an internal floating roof to control the emissions of VOC from this emissions unit according to the terms and conditions in Part II (General Facility Requirements) - Section E of this permit.

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.

   b. Emission Limitation:

      2.9 tpy of VOC

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the record keeping requirements specified in sections A.III.2 and A.III.3.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a 533,400-gallon, fixed roof, storage vessel for the storage of petroleum liquids with a true vapor pressure < 11 psia. This storage vessel is identified as tank number 254 (emissions unit T175) and is equipped with a submerged fill line and an internal floating roof.	40 CFR Part 60, Subpart Kb	See section A.I.2.a.
	40 CFR Part 61, Subpart FF	See section A.I.2.b.
	OAC rule 3745-31-05(A)(3) (PTI 15-1406)	1.0 tpy of volatile organic compounds (VOC)
	OAC rule 3745-21-09(L)	See sections A.I.2.c and A.I.2.d.
		See section A.I.2.e.

2. Additional Terms and Conditions

2.a The permittee shall utilize an internal floating roof to control the emissions of VOC from this emissions unit as specified in these terms and conditions. Each internal floating roof shall be equipped with a metallic shoe seal closure device situated between the wall of the storage vessel and the edge of the internal floating roof. The mechanical shoe seal shall consist of 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 shall span the annular space between the metal sheet and the floating roof.

2.b The permittee shall comply with the requirements of 40 CFR Part 60.112b(a)(1) as specified in these terms and conditions as an alternative to compliance with 40 CFR Part 61.343 (Subpart FF), NESHAP for Benzene Waste Operations, Standards for Tanks, in accordance with 40 CFR Part 61.353 (Subpart FF). By complying with 40 CFR Part 60.112b(a)(1), the permittee is exempt from the provisions of 40 CFR Part 61.343 (Subpart FF), NESHAP for Benzene Waste Operations, Tank Standards.

2.c The permittee shall employ a submerged fill line on this storage vessel.

2.d The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(L), 40 CFR Part 60, Subpart Kb, and 40 CFR Part 61, Subpart FF.

2.e The requirements specified by this rule are less stringent than the requirements established pursuant to 40 CFR Part 60, Subpart Kb.

II. Operational Restrictions

1. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside the storage vessel having 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. The internal floating roof shall be equipped with a closure device between the wall of the storage vessel and the edge of the internal floating roof. The closure device shall consist of a metallic shoe seal so that there is a continuous closure completely covering the space between the wall of the storage vessel and the edge of the internal floating roof. The 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 internal floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the internal floating roof.

3. Each opening in a non-contact 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.

4. Each opening in the internal floating roof except for the 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.

5. 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.

6. 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.

7. Each penetration of the internal floating roof used 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.

8. 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.

9. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall conduct the following inspections of the internal floating roof and its seals:

   a. Visually inspect the internal floating roof, the primary seal, and the secondary seal prior to filling the storage vessel with volatile liquids. 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.

   b. Visually inspect the vessel according to section A.III.1.c at least every 5 years or according to section A.III.1.d.

c. 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. 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% 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 volatile organic liquid.

d. 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 liquid 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 vessel from service within 45 days. If a failure that is detected during the initial inspections required 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. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the permittee will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

2. In no event shall inspections occur at intervals greater than 10 years in the case of vessels conducting annual inspections as specified in section A.III.1.d and at intervals no greater than 5 years in the case of vessels specified in section A.III.1.c.

3. The permittee shall keep a record of each inspection performed in accordance with section A.III. 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).

4. The permittee shall maintain a record of the volatile organic liquid stored, the period of storage, and the maximum true vapor pressure of that volatile organic liquid during the respective storage period. Available data on the storage temperature may be used to determine the maximum true vapor pressure in accordance with the methods and procedures defined in 40 CFR Part 60.116b(e).

5. All records shall be retained for at least 2 years except as identified in section A.III.5. Records shall be maintained in a manner that they can be readily accessed within 24 hours. Records may be maintained in a hard copy format or in a computer-readable format. The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel.

6. The permittee shall maintain records of the actual annual throughput of each liquid stored in this emissions unit, in either gallons/year or barrels/year.

7. The permittee shall calculate and maintain records of the annual VOC emissions from this emissions unit. The actual annual throughput(s) recorded for any calendar year shall be the basis for calculating the annual emissions of VOC by using the emissions estimation methodologies provided in the most current version of AP-42, section 5.1 "Transportation of Petroleum Liquids" or the most recent version of USEPA's TANKS computer program.

IV. Reporting Requirements

1. The permittee shall notify the Canton City Health Department, Air Pollution Control Division in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by section A.III.1.a or A.III.1.c to afford the agency the opportunity to have an observer present. If the inspection required by section A.III.1.c 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 Canton City Health Department, Air Pollution Control Division 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 Canton City Health Department, Air Pollution Control Division at least 7 days prior to the refilling.

2. The permittee shall report to the Canton City Health Department, Air Pollution Control Division any conditions described in section A.III.1.d that are detected during any annual inspection 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 the date of the repair. The report shall identify the storage vessel and the reason it did not meet the specifications of 40 CFR Part 61.112b(a)(1) or 40 CFR Part 60.113b(a)(3) and list each repair made.

3. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year. Should the actual total VOC emissions exceed 1.0 tpy, the permittee shall also submit the actual annual throughput of each liquid stored, as required in section A.III.6, and the calculations required in section A.III.7.

V. Testing Requirements

1. Compliance with the emission limitation and the control measure in sections A.I.1 and A.I.2.a of these terms and conditions shall be determined in accordance with the following methods:

a. Control Measure:

The permittee shall utilize an internal floating roof equipped with seals as defined in 40 CFR Part 60.112b(a)(1)(ii) to control the emissions of VOC from this emissions unit as specified in these terms and conditions.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.

b. Emission Limitation:

1.0 tpy of VOC

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in sections A.III.6 and A.III.7.

VI. Miscellaneous Requirements

Emissions Unit ID: T175

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
This emissions unit is a 30,000-gallon, fixed roof storage vessel for the storage of petroleum liquids with a true vapor pressure < 11 psia. This storage vessel is identified as tank number 267 (emissions unit T177) and is equipped with a submerged fill line and an internal floating roof.	40 CFR Part 60, Subpart Kb	See section A.I.2.a.
	OAC rule 3745-21-09(L)	See sections A.I.2.b and A.I.2.c.
	OAC rule 3745-31-05(A)(3) (PTI 15-1470)	2.1 tpy of volatile organic compounds (VOC)
		See sections A.I.2.c and A.I.2.d.

2. Additional Terms and Conditions

2.a The permittee shall utilize an internal floating roof to control the emissions of VOC from this emissions unit according to the terms and conditions in Part II (General Facility Requirements) - Section E of this permit.

2.b The requirements specified by this rule are less stringent than the requirements established pursuant to 40 CFR Part 60, Subpart Kb.

2.c The permittee shall employ a submerged fill line for this storage vessel.

2.d The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(L) and 40 CFR Part 60, Subpart Kb.

II. Operational Restrictions

1. The permittee shall comply with the applicable operational restrictions as specified in Part II - Section E of these terms and conditions.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall comply with the applicable monitoring and record keeping requirements as specified in Part II - Section E of these terms and conditions.

2. The permittee shall maintain records of the actual annual throughput of each liquid stored in this emissions unit, in either gallons/year or barrels/year.

3. The permittee shall calculate and maintain records of the annual VOC emissions from this emissions unit. The actual annual throughput(s) recorded for any calendar year shall be the basis for calculating the annual emissions of VOC by using the emissions estimation methodologies provided in the most current version of AP-42, section 5.1 "Transportation of Petroleum Liquids" or the most recent version of USEPA's TANKS computer program.

IV. Reporting Requirements

1. The permittee shall comply with the applicable reporting requirements as specified in Part II - Section E of these terms and conditions.

2. The permittee shall furnish the Canton City Health Department, Air Pollution Control Division with a report that describes the control equipment and certifies that the control equipment meets the specifications of 40 CFR Part 60.112b(a)(1) and 40 CFR Part 60.113b(a)(1). This report shall be an attachment to the notification required by 40 CFR Part 60.7(a)(3).

3. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year. Should the actual total VOC emissions exceed 2.1 tpy, the permittee shall also submit the actual annual throughput of each liquid stored, as required in section A.III.2, and the calculations required in section A.III.3.

V. Testing Requirements

1. Compliance with the emission limitation and the control measure in sections A.I.1 and A.I.2.a of these terms and conditions shall be determined in accordance with the following methods:

   a. Control Measure:

      The permittee shall utilize an internal floating roof to control the emissions of VOC from this emissions unit according to the terms and conditions in Part II (General Facility Requirements) - Section E of this permit.

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in section A.III.

   b. Emission Limitation:

      2.1 tpy of VOC

      Applicable Compliance Method:

      Compliance shall be demonstrated based upon the record keeping requirements specified in sections A.III.2 and A.III.3.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
north area cooling tower which processes approximately 20,800 gallons of non-contact water per minute	OAC rule 3745-17-11(B)	33.9 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 4500 mg/l and the cooling water maximum process flow rate of 20,800 gallons per minute, a PWR of 23.4 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 33.9 lbs/hr.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall test and record the TDS content, in mg/l, 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 Canton City Health Department, Air Pollution Control Division.

2. The permittee shall calculate and record the particulate emissions, in pounds per hour. The particulate emissions shall be calculated as follows:

   (20,800 gallons/minute) x (mg/liter TDS) x (0.0002) x (60 min/hr) x (3.785 liters/gallon) x (2.2046x10^-6 lbs/mg) = particulate emissions, in lbs/hr

where:

20,800 gallons/minute = the maximum water flow rate;
mg/liter = the TDS level;
0.0002 = the maximum drift loss factor;
60 min/hr = conversion factor for minutes to hours;
3.785 liters/gallon = conversion factor for liters to gallons; and
2.2046x10^-6 lbs/mg = conversion factor for milligrams 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 limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

   a. Emission Limitation:

      33.9 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.

      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 Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
south area cooling tower which processes approximately 19,200 gallons of non-contact water per minute	OAC rule 3745-17-11(B)	32.0 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 4500 mg/l and the cooling water maximum process flow rate of 19,200 gallons per minute, a PWR of 22.5 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 32.0 lbs/hr.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall test and record the TDS content, in mg/l, 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 Canton City Health Department, Air Pollution Control Division.

2. The permittee shall calculate and record the particulate emissions, in pounds per hour. The particulate emissions shall be calculated as follows:

   (19,200 gallons/minute) x (mg/liter TDS) x (0.0002) x (60 min/hr) x (3.785 liters/gallon) x (2.2046x10^-6 lbs/mg) = particulate emissions, in lbs/hr

where:

19,200 gallons/minute = the maximum water flow rate;
mg/liter = the TDS level;
0.0002 = the maximum drift loss factor;
60 min/hr = conversion factor for minutes to hours;
3.785 liters/gallon = conversion factor for liters to gallons; and
2.2046x10^-6 lbs/mg = conversion factor for milligrams 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 limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

   a. Emission Limitation:

      32.0 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.

   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 Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None	None

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None